Chas. C. Hewitt

PROCEEDINGS

OF THE

SIXTY-EIGHTH ANNUAL CONVENTION

OF THE

Connecticut Medical Society,

HELD AT

HARTFORD, MAY 23d AND 24th, 1860.

HARTFORD:
PRESS OF CASE, LOCKWOOD AND COMPANY.
1860.

THE

PROCEEDINGS

AND

MEDICAL COMMUNICATIONS

OF THE

CONNECTICUT MEDICAL SOCIETY.

SECOND SERIES—VOLUME I;

BEING NUMBERS I–IV, FOR 1860–1863.

NEW HAVEN:
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1863.

INDEX TO VOLUME I.

The numbers prefixed by ii., *refer to the second part of the volume.*

Officers of the Society

FOR 1860-61.

PRESIDENT.

ASHBEL WOODWARD, M. D., OF FRANKLIN.

VICE-PRESIDENT.

JOSIAH G. BECKWITH, M. D., OF LITCHFIELD.

TREASURER.

GEORGE O. SUMNER, M. D., OF NEW HAVEN.

SECRETARY.

PANET M. HASTINGS, M. D., OF HARTFORD.

Standing Committees.

Committee on Examination.

ASHBEL WOODWARD, M. D., *ex officio.*
TIMOTHY DIMOCK, M. D.
A. T. DOUGLASS, M. D.
S. B. BERESFORD, M. D.
JOEL CANFIELD, M. D.
WILLIAM WOODRUFF, M. D.

Committee to nominate Physician to Retreat for the Insane.

WM. WOODBRIDGE, M. D.
G. B. HAWLEY, M. D.
LEWIS WILLIAMS, M. D.
A. B. HAILE, M. D.
ROBERT HUBBARD, M. D.

Committee to nominate Professors in the Medical Institution of Yale College.

JOHN B. LEWIS, M. D.
ALBERT MORRISON, M. D.
BENJ. H. CATLIN, M. D.
WM. H. RICHARDSON, M. D.
D. H. HUBBARD, M. D.

Committee on Registration.

GURDON W. RUSSELL, M. D.
BENJ. H. CATLIN, M. D.
E. K. HUNT, M. D.

Committee on Publication.

P. G. ROCKWELL, M. D.
G. B. HAWLEY, M. D.
J. B. LEWIS, M. D.
P. M. HASTINGS, M. D.
ROBERT HUBBARD, M. D.

PROCEEDINGS.

THE annual Convention of the President and Fellows of the Connecticut Medical Society was held at the Hartford Hospital in the city of Hartford, May 23d and 24th, 1860.

The President, ASHBEL WOODWARD, M. D., called the Convention to order at 11 o'clock, A. M.

The Secretary having read the list of Fellows, returned by the clerks of the several counties, the following gentlemen were appointed a Committee on Credentials, viz.: Drs. G. W. Russell, C. B. Bromley and S. W. Gold.

Dr. RUSSELL, Chairman, reported the following list of Fellows for the present year, viz.:

FELLOWS.

HARTFORD COUNTY.

Gurdon W. Russell, M. D.
F. A. Hart, M. D.
Justus D. Wilcox, M. D.
A. W. Barrows, M. D.
R. A. White, M. D.

NEW LONDON COUNTY.

D. W. C. Lathrop, M. D.
Mason Manning, M. D.
*Robert M'Curdy Lord, M. D.
A. B. Haile, M. D.
Orrin E. Miner, M. D.

FAIRFIELD COUNTY.

David S. Burr, M. D.
Robert Hubbard, M. D.
Wm. C. Bennett, M. D.
R. P. Lyon, M. D.
George W. Birch, M. D.

MIDDLESEX COUNTY.

Ira Hutchinson, M. D.
*John E. Blake, M. D.
D. H. Hubbard, M. D.

---

* Absent.

NEW HAVEN COUNTY.

Samuel Punderson, M. D.
P. G. Rockwell, M. D.
C. L. Ives, M. D.
Joel Canfield, M. D.
R. T. Stillman, M. D.

WINDHAM COUNTY.

Joseph Palmer, M. D.
Calvin B. Bromley, M. D.
Wm. H. Cogswell, M. D.
Henry W. Hough, M. D.
*Gideon F. Barstow, M. D.

LITCHFIELD COUNTY.

W. W. Welch, M. D.
Wm. Woodruff, M. D.
Wm. Bissell, M. D.
S. W. Gold, M. D.
*Ralph Deming, M. D.

TOLLAND COUNTY.

Wm. H. Richardson, M. D.
G. H. Preston, M. D.
F. L. Dickinson, M. D.

The President then delivered the annual Address.

Dr. Woodruff moved that the thanks of the Convention be presented to Dr. Woodward for his timely and able Address, and that a copy be requested for publication with the Proceedings of the present year. Adopted.

Dr. Canfield moved that the Convention adjourn at 2 o'clock, for one hour. Adopted.

The Convention then proceeded to the election of officers for the ensuing year.

Drs. Sandford and Lathrop were appointed tellers.

The following gentlemen were duly elected:

ASHBEL WOODWARD, M. D., PRESIDENT.
J. G. BECKWITH, M. D., VICE-PRESIDENT.
G. O. SUMNER, M. D., TREASURER.
P. M. HASTINGS, M. D., SECRETARY.

President appointed as Committee on Unfinished Business of the last Convention, Drs. Haile, Burr, Hutchinson, Stillman, Hough, Bissell, Richardson and White.

The Secretary read the following communications, viz.:

From the American Medical Association, enclosing a Memorial to the Legislature of Connecticut, asking a revision of the laws relating

* Absent.

to the crime of Abortion, referred to Drs. Cogswell, Canfield and W. W. Welch.

A resolution passed by the New Haven County Meeting on the subject of Honorary Degrees and Honorary Membership, referred to Drs. S. W. Gold, White, Bennett, Ives and Manning.

The Treasurer read his annual Report; referred to Drs. Preston, Lyon and Birch.

Dr. Butler, Superintendent of Retreat for the Insane, invited the Members of the Convention to visit the Institution under his charge, to-morrow morning, at 8 o'clock. Accepted.

The Convention then proceeded to ballot for members of the Standing Committees, with the following result, viz.:

Committee on Examination,

Joel Canfield, M. D., of Guilford;

Wm. Woodruff, M. D., of Plymouth Hollow.

Committee to nominate Physician to Retreat for the Insane:

A. B. Haile, M D., of Norwich.

Robert Hubbard, M. D., of Bridgeport.

Committee to nominate Professors of Medical Department of Yale College:

Wm. H. Richardson, M. D., of Mansfield.

D. H. Hubbard, M. D., of Clinton.

The President appointed the following Standing Committees, viz:

Committee on Registration:

G. W. Russell, M. D., of Hartford.

Benjamin H. Catlin, M. D., of Meriden.

E. K. Hunt, M. D., of Hartford.

Committee on Publication:

P. G. Rockwell, M. D., of Waterbury.

G. B. Hawley, M. D., of Hartford.

J. B. Lewis, M. D., of Rockville.

P. M. Hastings, M. D., of Hartford.

Robert Hubbard, M. D., of Bridgeport.

The President announced the following Committees, viz.:

To nominate Delegates to American Medical Association for 1861, Drs. Russell, Haile, R. Hubbard, Woodruff, Palmer, Punderson, Dickinson and Hutchinson.

Committee to recommend candidates for Honorary Degrees and Honorary Membership, Drs. W. W. Welch, Lathrop, Burr, J. D. Wilcox, D. H. Hubbard, Bromley, F. A. Hart and Richardson.

Committee to nominate Dissertator and Alternate, Drs. Wood-

ruff, Palmer, Ives, Dickinson, Birch, Lathrop, L. D. Wilcox and D. H. Hubbard.

Committee to recommend Gratuitous Students to the Medical Department of Yale College, Drs. Barrows, Bennett, Manning, Hutchinson, Stillman, Gold, Preston and Hough.

A. B. Haile, M. D., of Norwich, appointed Dissertator at the last Convention, then read a Dissertation on Hygiene.

On motion by Dr. Rockwell,

Resolved, That the thanks of this Convention are justly due, and are freely presented to Dr. Haile for his instructive dissertation, and that a copy be requested for publication in our Proceedings. Adopted.

Dr. Gold, Chairman of Committee on New Haven County Resolution, reported the following resolution, which was adopted, viz.:

Resolved, That Candidates for the Honorary Degree of Doctor of Medicine and Honorary Membership, be published in the proceedings of this Society, and be not acted upon for one year subsequent to the time such nominations are made.

Dr. Woodruff, Chairman of Committee to nominate the Dissertator for the year, reported the names of

J. B. Lewis, M. D., of Rockville, as Dissertator.

L. S. Paddock, M. D., of Norwich, as Alternate.

Dr. James Welch read the report of Committee on Examinations for 1860. [See Appendix A.]

Dr. B. H. Catlin read the report of Committee to nominate Professors for Medical Department of Yale College. [See Appendix B.]

Dr. Barrows, Chairman of Committee on Gratuitous Students, recommended the following list, viz.:

Wm. McNiel, of New Haven County.
Ebenezer Witter, of Windham County.
James A. Bigelow, of Litchfield County.
Joel W. Hyde, of New Haven County.
Robert C. Hazzard, of New Haven County.
Henry Plumb, of New Haven County.
George W. Avery, of Windham County. Accepted.

Dr. Russell, Chairman, reported the names of the following gentlemen to represent this Society in the American Medical Association for 1861, viz.:

A. B. Haile, M. D., of Norwich.
L. J. Sandford, M. D., of New Haven.
Wm. Woodruff, M. D., of Plymouth.
Geo. B. Hawley, M. D., of Hartford.

Dr. Preston, Chairman of Committee to audit Treasurer's account, reported that they found the account correct, and would recommend the abatement of taxes due from County Clerks, as follows: E. K. Hunt, J. C. Bolles, D. L. Daggett, Jeremiah King, Hamilton Brewer, deceased, A. M. Huxley, D. A. Tyler, J. C. Jackson, Albert Hobron, F. J. Judson and Justin Sherwood, amounting to $188.28.

The following is a general summary of the Treasurer's report:

Cash in Treasury, ...		$100.61
Due from County Clerks, . .	$1,193.36	
Deduct one-half for bad debts, abatements, commissions, &c.	596.68	
		596.68
Cash and due from Clerks, ...		$697.29
The Society owes for debentures outstanding, .		485.50
Leaving balance in favor of the Society, of . .		$211.79

Drs. Russell, Rockwell and Hutchinson, were appointed a Committee to recommend some method of reducing the amount of unpaid taxes, to report to-morrow morning.

Dr. Wm. W. Welch, Chairman of Committee on Honorary Degrees and Honorary Membership, reported the names of Drs. Ebenezer Alden of Randolph, Mass., and B. Fordyce Barker, of New York, for Honorary Membership. Accepted.

Adjourned to 8½ o'clock, P. M.

Evening Session.

Dr. Hastings, Chairman of Committee on Publication, read a report which was adopted. [See Appendix C.]

A communication from the "National Quarantine and Sanitary Convention" was read by the Secretary, inviting the Society to send delegates to its fourth annual session, to commence in the city of Boston on the 14th day of June, 1860.

The following were appointed delegates in accordance with above request: Drs. G. B. Hawley, A. B. Haile and L. J. Sanford.

The following delegates were appointed to attend the Convention of the Massachusetts Medical Society for 1861:

E. K. Hunt, M. D., of Hartford County.
P. G. Rockwell, M. D., of New Haven County.
D. W. C. Lathrop, M. D., of New London County.

C. B. Bromley, M. D., of Windham County.
Wm. H. Richardson, M. D., of Tolland County.
John E. Blake, M. D., of Middlesex County.
David S. Burr, M. D., of Fairfield County.
J. G. Beckwith, M. D., of Litchfield County.

The following delegates were appointed to attend the Annual Meeting of the New York State Medical Society in 1861:

P. M. Hastings, M. D., of Hartford County.
R. F. Stillman, M. D., of New Haven County.
M. B. Pardee, M. D., of Fairfield County.
A. Woodward, M. D., of New London County.
J. G. Beckwith, M. D., of Litchfield County.
G. H. Preston, M. D., of Tolland County.
Jas. B. Whitcomb, M. D., of Windham County.
Ira Hutchinson, M. D., of Middlesex County.

Dr. Beckwith moved a tax of two dollars upon all members of the State Society, payable on the 1st of June, 1860. Adopted.

Adjourned to accept the hospitalities of the Hartford City Medical Society.

Met at Retreat for the Insane at 8 o'clock, A. M., May 24th.

Dr. Preston reported a Debenture Bill, which was read and adopted.

Dr. W. W. Welch reported the Memorial of the American Medical Association on the subject of Abortion, and moved that a Committee of three be appointed to bring the matter before the Legislature of this State during its present session. Adopted. Drs. Cogswell, Rising and Chas. Hooker were appointed such Committee.

Dr. Russell, Chairman of Committee on subject of Delinquent Members, reported the following resolution, viz.:

Resolved, That this Society require of the several County Meetings to dismiss all members who persistently refuse or neglect to pay their annual taxes. Adopted.

Dr. Beckwith offered the following resolution, viz.:

Resolved, That while we congratulate the members of the Medical profession of the city of Hartford, on the completion of their elegant and spacious hospital; we tender our thanks to the City Medical Society of Hartford, on this valued expression of its munificent hospitality, and the unusual facilities which they have afforded the Convention in the transaction of its business during its present session. Adopted.

On motion of Dr. Haile,

Resolved, That the thanks of this Society be tendered to the proprietors of Wadsworth's Atheneum, for the kind invitation to visit the Gallery of Paintings, and to Dr. Butler for the courtesies extended by them to the members of the Connecticut Medical Society. Adopted.

Dr. Russell moved that an edition of one thousand copies of the Proceedings be printed and distributed to the County Clerks. Adopted.

Dr. Ives offered the following resolution, viz.:

Resolved, That this Convention, recognizing the necessity of adopting some measure, more fully to carry out the original designs of the founders of this Society, in the advancement and diffusion of Medical knowledge, and the promotion of kind feeling among its members, and thereby to add to the interest and value of its meetings, do appoint a Committee of one from each county, to inquire into the propriety of re-organizing, on a more voluntary basis, and report at the next annual meeting. Adopted.

The following were appointed a Committee under above resolution, viz.:

Chas. L. Ives, of New Haven County.
Gurdon W. Russell, of Hartford County.
Ashbel Woodward, of New London County.
E. B. Nye, of Middlesex County.
J. B. Lewis, of Tolland County.
E. P. Bennett, of Fairfield County.
J. G. Beckwith, of Litchfield County.
Joseph Palmer, of Windham County.

On motion of Dr. Punderson, the Convention adjourned, to meet in New Haven on the fourth Wednesday in May, 1861.

P. M. HASTINGS, *Secretary.*

MEMBERS OF THE SOCIETY.

HONORARY MEMBERS.

FELIX PASCALIS,	New York.
*JAMES JACKSON,	Boston, Mass.
*JOHN C. WARREN,	Boston, Mass.
*SAMUEL L. MITCHELL,	New York.
*DAVID HOSACK,	New York.
*WRIGHT POST,	New York.
BENJAMIN SILLIMAN,	New Haven.
*GEORGE M'CLELLAN,	Philadelphia, Pa.
*JOHN MACKIE,	Providence, R. I.
*CHARLES ELDREDGE,	East Greenwich, R. I.
*THEODORE ROMEYN BECK,	Albany, N. Y.
*JAMES THATCHER,	Plymouth, Mass.
EDWARD DELAFIELD,	New York.
JOHN DELAMATER,	Cleveland, Ohio.
*WILLIAM P. DEWEES,	Philadelphia, Pa.
*JOSEPH WHITE,	Cherry Valley, N. Y.
JACOB BIGELOW,	Boston, Mass.
WALTER CHANNING,	Boston, Mass.
*PHILIP SING PHYSIC,	Philadelphia, Pa.
*LEWIS HEERMAN,	U. S. Navy.
*DANIEL DRAKE,	Cincinnati, Ohio.
HENRY MITCHELL,	Norwich, N. Y.
NATHAN RYNO SMITH,	Baltimore, Md.
VALENTINE MOTT,	New York.
*SAMUEL WHITE,	Hudson, N. Y.
REUBEN D. MUSSEY,	Cincinnati, Ohio.
*WILLIAM TULLY,	Springfield, Mass.
RICHMOND BROWNELL,	Providence, R. I.
*WILLIAM BEAUMONT,	St. Louis, Mo.

* Deceased.

SAMUEL HENRY DICKSON, -	Charleston, S. C.
*SAMUEL B. WOODWARD, -	Northampton, Mass.
*JOHN STEARNS, - - - -	New York.
STEVEN W. WILLIAMS, - -	Deerfield, Mass.
*HENRY GREEN, - - - -	Albany, N. Y.
*GEORGE FROST, - - -	Springfield, Mass.
WILLARD PARKER, - - -	New York.
BENAJAH TICKNOR, - -	U. S. Navy.
ALDEN MARCH, - - - -	Albany, N. Y.
*AMOS TWITCHELL, - -	Keene, N. H.
CHARLES A. LEE, - - -	New York.
DAVID S. C. H. SMITH, - -	Providence, R. I.
*JAMES M. SMITH, - - -	Springfield, Mass.
HENRY D. BULKLEY, - -	New York.
J. MARION SYMS, - - -	New York City.
JOHN WATSON, - - -	New York City.
FRANK H. HAMILTON, -	Buffalo, N. Y.
ROBERT WATTS, - - -	New York.
J. V. C. SMITH, - - - -	Boston, Mass.
O. WENDELL HOLMES, - -	Boston, Mass.
JOSEPH SARGENT, - - -	Worcester, Mass.
MASON F. COGSWELL, - -	Albany, N. Y.
FOSTER HOOPER, - - -	Fall River, Mass.
THOMAS C. BRINSMADE, -	Troy, N. Y.
GEORGE CHANDLER, - -	Worcester, Mass.
GILMAN KIMBALL, - - -	Lowell, Mass.
JAMES McNAUGHTON, - -	Albany, N. Y.
USHER PARSONS, - - -	Providence, R. I.
S. D. WILLARD, - - - -	Albany, N. Y.
JOHN WARE, - - - -	Boston, Mass.

Gentlemen proposed for Honorary Membership—

EBENEZER ALDEN, - - -	Randolph, Mass.
B. FORDYCE BARKER, - -	New York City.

ORDINARY MEMBERS.

The names of those Members who are exempt from taxation by age, are in italics; the names of those who have been Presidents of the Society, are in capitals.

HARTFORD COUNTY.

E. K. HUNT, M. D., Chairman.

GEORGE CLARY, M. D., Clerk.

HARTFORD, Henry Holmes, S. B. Beresford, G. B. Hawley, G. W. Russell, David Crary, P. W. Ellsworth, E. K. Hunt, J. S. Butler, J. C. Jackson, A. W. Barrows, *Thomas Miner*, *H. Gridley*, William Porter, John F. Wells, William R. Brownell, P. M. Hastings, Edward Brinley, *Stephen H. Fuller*, George Clary, W. H. Tremaine, Lucian S. Wilcox, Stephen E. Fuller, Henry S. Stearns.
BERLIN, E. Brandagee.
BLOOMFIELD, Henry Gray.
BRISTOL, Roswell Hawley.
BURLINGTON, William Elton, 2d.
CANTON, *Collinsville*, R. H. Tiffany.
EAST HARTFORD, S. L. Child, H. K. Olmsted.
Broad Brook, Marcus L. Fisk.
Warehouse Point, Joseph Olmsted.
ENFIELD, J. P. Converse, A. L. Spalding.
Thompsonville, L. S. Pease.
FARMINGTON, *Asahel Thompson*.
Plainville, G. A. Moody.
GLASTENBURY, H. Clinton Bunce.
South Glastenbury, C. E. Hammond.
Eastbury, Sabin Stocking.
East Granby, *Chester Hamlin*.
West Granby, *Justus D. Wilcox*.
North Granby, Francis F. Allen.
MANCHESTER, Wm. Scott.
NEW BRITAIN, *Samuel Hart*, E. D. Babcock, B. N. Comings, S. W. Hart.
ROCKY HILL, R. W. Griswold.
SIMSBURY, R. A. White.
Tariffville, G. W. Sandford.
SOUTHINGTON, *Julius S. Barnes*, N. H. Byington, F. A. Hart.
SOUTH WINDSOR, H. C. Gillette, *H. Goodrich*.
East Windsor Hill, Sidney Rockwell, William Wood.
SUFFIELD, Aretus Rising.
West Suffield, O. W. Kellogg.
WETHERSFIELD, *E. F. Cook*, A. S. Warner, R. Fox.
WEST HARTFORD, Edward Brace.
WINDSOR, *Wm. S. Pierson*, A. Morrison, S. A. Wilson.
WINDSOR LOCKS, Samuel W. Skinner.
AVON, Frank Wheeler.

NEW HAVEN COUNTY.

N. B. IVES, M. D., Chairman.

LEONARD J. SANDFORD, M. D., Clerk.

NEW HAVEN, *Eli Ives*, *Jonathan Knight*, *Samuel Punderson*, *A. S. Monson*, *Charles Hooker*, N. B. Ives, E. H. Bishop, Levi Ives, P. A. Jewett, D. L. Daggett, Geo. O. Sumner, D. A. Tyler, Henry Bronson, E. A. Park, S. G. Hubbard, W. J. Whiting, H. W. E. Matthews, C. A. Linsley, Worthington Hooker, T. H. Totten, John Nicoll, *C. H. Austin*, Moses C. White, L. J. Sandford, C. L. Ives, Edward Bulkley, Jr., S. C. Gourdin, Wm. B. De Forest, Frederick Dibble, Edward Malone.
Fair Haven, *Lyman Parker*, C. S. Thompson, W. M. White.
Westville, Samuel Lloyd.
ORANGE, Henry W. Painter.
BETHANY, Asa C. Woodward.
BRANFORD, H. V. C. Holcomb.
North Branford, Sheldon Beardsley.
CHESHIRE, A. J. Driggs, W. C. Williams.
DERBY, Charles H. Pinney.
Birmingham, Ambrose Beardsley.
Humphreysville, Thomas Stoddard, S. C. Johnson, Joshua Kendall.
GUILFORD, Joel Canfield, Alvan Talcott.
HAMDEN, Edwin D. Swift.
MADISON, D. M. Webb.
MERIDEN, N. Nickerson.
West Meriden, B. H. CATLIN, E. W. Hatch, A. H. Churchill.
MILFORD, *Hull Allen*, L. N. Beardsley, Thomas Dutton.
NAUGATUCK, J. D. Mears.
North Haven, R. F. Stillman.
OXFORD, Lewis Barnes.
SOUTHBURY, A. B. Burritt.
South Britain, N. C. Baldwin.
WALLINGFORD, Nehemiah Banks.
WATERBURY, *M. C. Leavenworth*, G. L. Platt, John Deacon, G. E. Perkins, P. G. Rockwell, Thomas Dougherty.
WOODBRIDGE, *Isaac Goodsell*, Andrew Castle.

NEW LONDON COUNTY.

MASON MANNING, M. D., Chairman.

L. S. PADDOCK, M. D., Clerk.

NEW LONDON, *Dyer T. Brainard*, *N. S. Perkins*, Isaac G. Porter, Wm. W. Miner, D. P. Francis, Albert Hobron, Robert A. Manwarring, Robert McCurdy Lord, A. T. Douglass.
NORWICH, *Richard P. Tracy*, *Erastus Osgood*, Elijah Dyer, Elisha Phinney, A. B. Haile, Edwin Bently, Daniel F. Gulliver, Lewis S. Paddock, D. W. C. Lathrop.
BOZRAH, Samuel Johnson.
COLCHESTER, *Ezekiel Parsons*, *Frederick Morgan*, Melancthon Storrs.
EAST LYME, *John L. Smith*.
FRANKLIN, ASHBEL WOODWARD.
GROTON, *Joseph Durfey*.
LEBANON, *Joseph Comstock*, Ralph E. Greene.
LYME, *Richard Noyes*.
MONTVILLE, John C. Bolles.
Uncasville, S. E. Maynard.
PRESTON, *E. B. Downing*.
STONINGTON, *William Hyde*, George E. Palmer, William Hyde, Jr.
Mystic, *Mason Manning*, N. M. Trabon.
Mystic Bridge, E. F. Coats.
Mystic River, A. W. Coats.
Noank, Orrin E. Miner.

FAIRFIELD COUNTY.

E. P. BENNETT, M. D., Chairman.

D. S. BURR, M. D., Clerk.

FAIRFIELD, S. P. V. R. Ten Broeck.
Greenfield, RUFUS BLAKEMAN.
Southport, Justus Sherwood.
BRIDGEPORT, D. H. Nash, F. J. Judson, H. L. W. Burritt, *Wm. B. Nash*, Robert Hubbard, H. N. Bennett.
BROOKFIELD, A. L. Williams.
DANBURY, E. P. Bennett, Wm. C. Bennett, Elijah Gregory.
HUNTINGTON, *James H. Shelton*.
NEW CANAAN, *Samuel S. Noyes*, *Lewis Richards*.
NORWALK, *John A. McLane*, Ira Gregory, Samuel Lynes, Jno. W. McLane.
South Norwalk, M. B. Pardee.
Redding, Geo. W. Birch.
RIDGEFIELD, O. S. Hickock.
STAMFORD, N. D. Haight, Lewis Hurlburt.
DARIEN, Samuel Sands.
STRATFORD, *Wm. T. Shelton*, James Baldwin, R. C. McEwin.
TRUMBULL, George Dyer.
WESTPORT, George Blackman, David S. Burr.
GREENWICH, J. H. Hoyt.

WINDHAM COUNTY.

SAMUEL HUTCHINS, M. D., Chairman.

JAMES B. WHITCOMB, M. D., Clerk.

ASHFORD, John H. Simmons.
BROOKLYN, James B. Whitcomb, Wm. Woodbridge.
CANTERBURY, *Elijah Baldwin*, Joseph Palmer.
CHAPLIN, *Orrin Witter*.
HAMPTON, *Dyer Hughes, Jr.*
Daysville, Justin Hammond.
South Killingly, Daniel A. Hovey.
West Killingly, Samuel Hutchins, *David E. Hall*.
East Killingly, Edwin A. Hill.
Putnam, H. W. Hough, Gideon F. Barstow.
PLAINFIELD, WM. H. COGSWELL.
Moosup, Lewis E. Dixon.
Centreville, Charles H. Rogers.
STERLING, Wm. A. Lewis.
VOLUNTOWN, *Harvey Campbell*.
THOMPSON, Lowell Holbrook, John McGregor.
Woodstock, *Lorenzo Marcy*.
North Woodstock, Asa Witter.
West Woodstock, Milton Bradford.
POMFRET, *Hiram Holt*, Lewis Williams.
WINDHAM, *Chester Hunt*.
Scotland, Calvin B. Bromley.

LITCHFIELD COUNTY.

HENRY M. KNIGHT, M. D., Chairman.

G. B. MILLER, M. D., Clerk.

LITCHFIELD, J. G. Beckwith, George Seymour, H. W. Buell, D. E. Bostwick.
South Farms, Garry H. Miner.
CANAAN, Ithamar H. Smith, A. A. Wright.
South Canaan, John A. Gillett.
CORNWALL, Burritt B. North.
West Cornwall, *Samuel W. Gold*, Edward Sandford.
Gaylord's Bridge, G. H. St. John.
GOSHEN, A. M. Huxley.
HARWINTON, G. B. Miller.
KENT, *Wells Beardsley*.
NEW MILFORD, *Jehiel Williams*.
BRIDGEWATER, *Horace Judson*.
NORTHFIELD, D. B. W. Camp.
NORFOLK, Wm. W. Welch, John H. Welch.
PLYMOUTH, Samuel T. Salisbury.

Plymouth Hollow, Wm. Woodruff.
ROXBURY, Myron Downes.
Lakeville, *Benj. Welch*, Wm. Bissell, H. M. Knight.
SHARON, *Ralph Deming*, Wm. W. Knight.
Wolcottville, *E. Bancroft*, J. W. Phelps.
WARREN, John B. Derickson.
WASHINGTON, *R. M. Fowler*.
New Preston, S. H. Lyman, E. P. Lyman.
West Winsted, Jas. Welch, J. W. Bidwell.
WOODBURY, Charles H. Webb, Harmon W. Shove.

MIDDLESEX COUNTY.

IRA HUTCHINSON, M. D., Chairman.

S. W. TURNER, M. D., Clerk.

MIDDLETOWN, *Joseph Barrett*, *Charles Woodward*, Elisha B. Nye, George W. Burke, John E. Blake, Rufus Baker.
CROMWELL, *Ira Hutchinson*.
East Hampton, F. G. Edgerton.
Middle Haddam, A. B. Worthington.
CHESTER, S. W. Turner.
CLINTON, D. H. Hubbard.
DURHAM, R. W. Mathewson.
EAST HADDAM, *Asa M. Holt*, *Datus Williams*.
HADDAM, Miner C. Hazen.
PORTLAND, *George O. Jarvis*, G. C. H. Gilbert.
SAYBROOK, *Asa H. King*.
Essex, A. H. Hough.
Deep River, Edwin Bidwell.
Westbrook, Horace Burr.

TOLLAND COUNTY.

WILLIAM N. CLARK, M. D., Chairman.

GILBERT H. PRESTON, M. D., Clerk.

TOLLAND, *O. K. Isham*, G. H. Preston.
BOLTON, Charles F. Sumner.
North Coventry, *Eleazur Hunt*.
South Coventry, Timothy Dimock, Henry S. Dean.
HEBRON, Orrin C. White.
Mansfield Centre, *Earl Swift*, O. B. Griggs.
Mansfield Depot, *Norman Brigham*.
MANSFIELD, Wm. H. Richardson.
SOMERS, *Orson Wood*.
East Stafford, Wm. N. Clark.
West Stafford, J. C. Blodgett.
Stafford Springs, C. B. Newton.
Staffordville, S. F. Pomeroy.
Rockville, *Alden Skinner*, Stephen G. Risley, John B. Lewis.
WILLINGTON, Francis L. Dickinson.

SUMMARY OF ORDINARY MEMBERS FOR 1860; WITH DEATHS REPORTED FOR THE YEAR ENDING APRIL 1st, 1860.

	Taxable.	Not Taxable.	Total.	Deaths.
Hartford County,	58	12	70	2
New Haven County,	60	10	70	1
New London County,	26	13	39	1
Fairfield County,	27	6	33	1
Windham County,	20	8	28	0
Litchfield County,	30	8	38	0
Middlesex County,	15	7	22	0
Tolland County,	14	6	20	1
	250	70	320	6

NOTE.—Former Fellows of the Connecticut State Society are *permanent members* of the Annual Convention, having the privilege of attending all meetings and performing all the duties of Fellows, except voting. All the members of the Society are invited to be present at the meetings of the Convention.

DEATHS OF MEMBERS DURING THE YEAR ENDING APRIL 1st, 1860, WITH THE AGE AND DISEASE SO FAR AS ASCERTAINED.

	Disease.
Hartford County.	
Benjamin Rogers, age 80 years.	————
New Haven County.	
Chas. B. McCarty, age 55 years.	Typhoid Fever.
Joseph F. Jewett, age 71 years.	Congestion of Lungs.
New London County.	
James Morgan, age 57 years,	Lumbar Abscess.
Fairfield County.	
Elijah Middlebrook.	————
Tolland County.	
Horatio Dow, age 66 years.	Apoplexy.

DUTIES OF COUNTY CLERKS.

To warn County Meetings.

To record the proceedings of the County Meetings.

To collect the taxes and pay the same to the Treasurer.

To transmit to the Secretary a list of the elected Fellows, and the person recommended as a candidate for a gratuitous course of lectures, immediately after the County Meetings, for publication.

To make certificates of Fellowship, to be transmitted to the Secretary, on or before the first day of the Convention.

To transmit to the Treasurer the names of the Fellows elect, immediately after the County Meetings.

To return to the Treasurer the names of Members delinquent on taxes, with the amounts severally due from each.

To transmit duplicate lists of the Members of the Society to the Secretary and Treasurer, on or before the first day of the Convention, on penalty of five dollars for each neglect.

To report to the Secretary of the State Society, on the first day of its Annual Convention, the names, ages, and diseases of the Members of this Society who have died during the year preceding the 1st of April in each year, in their several County Societies.

RULES OF ORDER.

1. Organization.
2. Certificates of Membership presented and read by the Secretary.
3. Committee on the Election of Fellows.
4. Address of President.
5. Election of Officers for ensuing year.
6. Unfinished business of previous year disposed of.
7. Reception and reference, without debate, of Communications, Resolves, &c., from the several Counties, and Members of the Convention.
8. Reading Treasurer's Report.
9. Committee to audit the same.
10. Committee on Debentures.
11. Standing Committees appointed.
12. Committee to nominate Delegates to National Convention.
13. Committee on Candidates for Gratuitous Course of Lectures.
14. Committee on Honorary Degrees and Honorary Memberships.
15. Committee to nominate Dissertator.
16. Dissertation.
17. Reports of Committees appointed on County Communications, Resolves, &c.
18. Reports of Standing Committees.
19. Reports of Committees in the order in which business was brought forward in Convention.
20. Miscellaneous Business.

LIST OF ADDRESSES AND DISSERTATIONS

DELIVERED IN CONVENTION.

1793 President's Address, by Dr. Leaveritt Hubbard.
1794 Prize Essay on Autumnal Bilious Fever, by Dr. S. H. P. Lee.
1794 Prize Essay on the Properties of Opium, by Dr. Gideon Shepherd.
1795 Eulogy on Dr. L. Hubbard, by Dr. Eneas Munson, President.
1795 Prize Essay on the Preparation of Antimony, by Dr F. P. Ouviere.
1795 Prize Essay on the Different Species of Colic, by Dr. Thaddeus Betts.
1796 Prize Essay on the Contagion of Yellow Fever, by Dr. F. P. Ouviere.
1796 Prize Essay on Cynanche Tonsillaris, by Dr. S. H. P. Lee.
1796 Prize Essay on the Most Eligible Mode of Increasing Medical Knowledge in this State, by Dr. Lewis Collins.
1796 Prize Essay on same subject, by Dr. Gideon Shepherd.
1798 History of a case of Bilious Concretion, by Dr. Lemuel Hopkins.
1798 An Essay by Dr. Jared Potter.
1799 A Dissertation, by Dr. Thaddeus Clark.
1800 A Dissertation on Lunacy, by Dr. Nathaniel Dwight.
1804 Essay on the Stafford Mineral Waters, by Dr. Samuel Willard.
1812 Essay on the necessity of a Hospital for Lunatics in this State, by Dr. Nathaniel Dwight.
1817 Dissertation on the Deleterious Effects of Ardent Spirits, by Dr. W. R. Fowler.
1818 On Ergot, by Dr. William Buel.
1820 Dissertation on Typhus Fever, by Dr. Thomas Miner.
1821 Dissertation on Uterine Hemorrhage by Dr. Samuel Rockwell.
1822 Dissertation on the Yellow Fever at Middletown, by Dr. William Tully.
1823 Dissertation, by Dr. Dyer T. Brainard.
1829 Dissertation on Extra-uterine Conception, by Dr. George Sumner.
1830 Dissertation on Diseases of the Ear, by Dr. Charles Hooker.
1835 Dissertation on the Vitality of the Blood, by Dr. Benjamin Welch, Jr.
1836 Influence of Moral Emotions on Disease, by Dr. E. H. Bishop.

1837 An Address by the President, Dr. Thomas Miner.
1837 A Dissertation on Scarlet Fever, by Dr. Archibald Welch.
1838 A Dissertation on Spinal Irritation, by Dr. Isaac G. Porter.
1839 A Dissertation on the Mental Qualifications necessary to a Physician, by Dr. Henry Bronson.
1840 A Dissertation on the Advantages of Prompt and Efficient Practice in Acute Diseases, by Dr. Richard Warner.
1841 An Address by the President, Dr. Silas Fuller.
1841 A Dissertation on Insanity as a subject of Medical Jurisprudence, by Dr. Amariah Brigham.
1842 A Dissertation on Uterine Irritation, by Dr. Chas. Woodward.
1843 An Address by the President, Dr. Elijah Middlebrook.
1843 A Dissertation on Phlebitis, by Dr. Pinckney W. Ellsworth.
1844 A Dissertation on the Respect due to the Medical Profession, and the Reasons that it is not awarded by the Community, by Dr. Worthington Hooker.
1845 A Dissertation on Laryngismus Stridulus, by Dr. N. B. Ives.
1846 A Dissertation, Practical Observations on Typhus Fever, by Dr. Theodore Sill.
1847 A Dissertation on the Importance of a Medical Organization and the Advantages resulting from it, by Dr. E. K. Hunt.
1848 A Dissertation on Some Forms of Non-Malignant disease of the Cervix Uteri, by Dr. B. Fordyce Barker.
1849 An Address by the President, Dr. Archibald Welch.
1849 A Dissertation on Hygiene, by Dr. Alvan Talcott.
1850 A Dissertation on Medical Jurisprudence, by Dr. Johnson C. Hatch.
1851 An Address by the President, Dr. George Sumner, on the Early Physicians of Connecticut.
1853 An Address by the President, Dr. Rufus Blakeman, on the Early Physicians of Fairfield County.
1853 A Dissertation on Popularizing Medicine, by Dr. Samuel Beach.
1854 A Dissertation on Diseased Cervix Uteri, by Dr. Wm. B. Casey.
1855 A Dissertation on Registration as the Basis of Sanitary Reform, by Dr. Stephen G. Hubbard.
1857 An Address by the President, Dr. Benjamin H. Catlin.
1857 A Dissertation on the Medical Profession, by Dr. Benj. D. Dean.
1858 An Address by the President, Dr. Benjamin H. Catlin.
1859 An Address by the President, Dr. Ashbel Woodward.
1859 A Dissertation on the Issue, by Dr. Rufus Baker.
1860 An Address by the President, Dr. Ashbel Woodward.
1860 A Dissertation by Dr. A. B. Haile.

MEDICAL ETHICS.

THE

ANNUAL ADDRESS

DELIVERED BEFORE THE

CONVENTION

OF THE

Connecticut Medical Society,

AT

HARTFORD, MAY 23D, 1860.

BY ASHBEL WOODWARD, M. D., OF FRANKLIN,
PRESIDENT OF THE SOCIETY.

HARTFORD:
PRESS OF CASE, LOCKWOOD AND COMPANY.
1860.

ADDRESS.

MR. VICE-PRESIDENT, AND GENTLEMEN:

Recent occurrences have suggested the propriety of offering to the Convention a few thoughts on the subject of Medical Ethics. It is unnecessary to revert at length to particulars still fresh in the memory of all present. The Society acting in strict conformity to regulations adopted for the management of its internal affairs, deemed it an imperative, though painful duty, to exclude an individual from membership. Whenever a controversy arises in a corporation, be it large or small, civil or religious, the popular mind naturally sides with the weaker party. If the person subjected to censure, has been guilty of no misdemeanor in the eye of the municipal law, and no transgression against the requirements of the Divine laws; if the offense relate to interior stipulations wholly unconnected with the affairs of the world at large, he is morally sure to receive the spontaneous sympathies of the public. This impulse, though apparently generous, is frequently most unjust. It is a blind, reckless, illogical impulse, dashing at conclusions without regard for intermediate facts. It ignores the right inherent in every corporation to institute by-laws conformable to the provisions of its charter—by-laws that can never impose hardships, or be made implements of oppression, because freely enacted or freely assented to by every one on whom their demands are laid. It would withdraw the matter in dispute from the cognizance of the appropriate tribunal, referring it to another which acknowledges no allegiance to the violated rule.

The history of the past year amply illustrates the truth of what we say. Several newspapers of the State officiously interfering, have thrown the gauntlet with words of gratuitous provocation. On the floor of the legislature our Society has been the subject of bitter attack. While so many filling positions of influence have been forward to condemn, have *disinterested* voices in any quarter been lifted

in defense? Some of our own number ably vindicated the action we were compelled to take. But for reasons already hinted at, any justification issuing from the immediate members of an injured society is too often prejudged and precondemned.

It is no part of our purpose to review the merits of that controversy. Far be it from us to rake the ashes from dying embers and kindle a flame over the fading sparks. Leaving all personal matters behind we desire to investigate principles; to show the deceitfulness of trusting to extraneous sources for aid in the furtherance of philanthropic plans, and to exhibit the necessity and advantage of a conscientious adherence to the provisions of a carefully digested medical code.

In one respect the endeavors of the medical profession to ameliorate the condition of the unfortunate have been promoted by legislative assistance. Unaided by governmental appropriations, they could never have erected the magnificent charities which in the more important cities of the civilized world offer an asylum to thousands who otherwise would be left homeless and friendless to languish and die. In the establishment of institutions for the reception of the blind, the insane, and others whose misfortunes make peculiar demands on human sympathy, the benevolence and wisdom of the physician have been seconded by generous donations from the State.

Beyond this, equally unselfish attempts to advance the public welfare through the medium of legislative enactments have signally failed. Occasionally medical organizations have been tempted to petition for the passage of such laws as would guard the people against the impositions of the charlatan. They have simply demanded that he should lay aside the mask of secrecy, so that the suffering, ready to catch at every straw of hope, and peculiarly exposed to the arts of the empiric, might know the value of the support thus thrust upon them in the hour of need. The futility of all these endeavors, however, is now apparent. The motives of the physician have been studiously misinterpreted. Disinterested intentions have been credited to the suggestions of jealousy or avarice. Reproach and ridicule alone have rewarded unselfish efforts to protect the public health against one of the most insidious and destructive of its foes.

These and numerous other coincident facts should teach us lessons of wisdom. It is high time to arrive at the unqualified conviction that the honor, the dignity, the social standing and moral power of the medical profession are committed entirely to its own guardianship. Extrinsic aid we should neither expect nor desire. The

sources of usefulness and strength lie within. Buried beneath our feet are mines of priceless value. *We* must sink the shafts and develop the hidden wealth. Whether we aim at self-improvement or the promotion of the public good, fortunately the same means fulfill both objects at once. Through superiority of professional skill and the force of argument alone, can we hope to exact an acknowledgment of our claims.

When an individual enters a vocation designing to make the discharge of its duties the business of life, a new class of obligations is at once imposed upon him. As a common origin, a common history, common language, manners and laws ought to imbue the soul of the citizen with feelings of devoted attachment to the land of his birth; as in a narrower sphere, the same blood, the same associations, the same joys and sorrows, ought to unite the members of a family with inseparable bonds of love, causing each to experience habitually the tenderest solicitude for the wellbeing of the rest; so the many points of common sympathy and common interest should lead every one on admission to the privileges of a professional brotherhood, to devote to the support, and advancement, and honor of the fraternity, a share of his choicest thoughts. Patriotism, natural affection, and the *esprit de corps* are all flowerings from one root whose radicles are intertwined with the fibres of the universal human heart. Whoever regards with unconcern the welfare of his chosen calling, feeling no thrill of pleasure or pain as prosperity brightens or adversity darkens its pathway, could witness the desolation of country or the ruin of kin, so far as he escaped unscathed, without a groan or a tear.

The establishment of the American Medical Association and the adoption of an ethical code introduced a new era in the progress of the profession. Until then it lacked a center. There was no adequate medium through which the enthusiasm of the earnest and the ardent could be brought to bear upon the spirits of others. If the reformer lifted his voice against abuses his words were audible to but few. If the scholar glowing with generous zeal, devised plans to increase its usefulness, his labors, the result perhaps of years of patient thought, were published under the sanction of his individual name alone. Former isolation and independency of action were most unfavorable to the general prosperity of medical science.

Now not only do the annual meetings draw together from all parts of the country men whose rich stores of wisdom and experience are thus made available for the common benefit, but far more than this, the precepts of the code penetrating everywhere, have brought order

out of confusion and impressed the signet of unity upon all who obey its rules.

From the nature of our profession ethical principles laid down in the form of binding laws can constitute the only rational bond of union. The parallelism between the state and associations of men within the state is of course imperfect. Yet it may not be unprofitable to notice some of the particulars in which the code applied to a voluntary society, resembles in operation a national constitution adopted for the commonwealth. Points of difference will be instructive likewise.

Constitutional limitations affording guarantees against the two extremes of despotism and anarchy, conferring equal rights, securing privileges, enforcing duties, and drawing every citizen within the shelter of the law, make millions, otherwise defenseless, invincible through the union of their strength. The code working upon similar motives, though employing different means, gathers into one community the laborers in thousands of widely scattered fields. National government supreme, acknowledging no superior among the sovereignties of earth, is vested with the power requisite to compel obedience. It bars the ways of crime with fines and with prisons, that where the restraints of conscience are weak, the terrors of punishment may be strong. The force inherent in the code is wholly of a moral character, and instead of acting upon the fears, appeals to the noblest sentiments of humanity. In a series of rules adopted for the observance of physicians in intercourse with each other and the sick, are embodied the wisdom and virtue of ages. Every section breathes the spirit of philanthropy and benevolence, of manly honor and christian charity. Legislators frame laws to regulate the conduct simply. The statute contemplates only overt acts. It does not attempt to purify the fountains of human manners, for its restraints depend on the weight of penalties, and penalties are inflicted for open transgressions. Bad men can plot villanies and do wickedness with impunity so long as crafty discernment enables them to keep within the strict letter of the law. Our ethical system, on the other hand, strives to ennoble the outward life by first ennobling the heart. Deriving its entire efficacy from the purity of its principles, it addresses the conscience directly. The members of the Association are obligated to pursue a specified line of conduct because it is both reasonable and right that they should do so. Regulations characterized by justice and magnanimity, if inflexibly adhered to, put the sting of disability into the temptation to act unfairly.

The citizen is in duty bound to obey the laws of the state. Yet in most instances he has had no personal share in the enactment of those laws. He was born under them, lives under them, and except by expatriation can not avoid their binding force if he would. Much more then ought the physician to yield cheerful obedience to the requirements of a code which he deliberately subscribed to, on admittance to the privileges of the Association. The obligation was not thrust upon him, but assumed of his own free will, so that it has the additional sanction of his sacred word and honor. And is it not the crowning glory of man to value truth more than life—under all circumstances to keep promises inviolate?

The Medical Society has invariably shunned every appearance of espionage, and instead of hunting for delinquencies, has been disposed to pass them unnoticed whenever this could be done without too great a compromise of self-respect. It employs no coercive power to compel observance of the compacts mutually agreed upon, nor does it hold out penal consequences to deter from the breaking of voluntary pledges. If any considering the platform of the Society too high, the doctrines too severe, the morality too rigid, become dissatisfied and prefer to conform to a lower standard, the doors of exit are freely open. But upon a change of views if he would act honorably, so that his name may appear without a stain of reproach, let him *first* seek the severance of former ties by a regular withdrawal. Then he is free to act as impulse may impel. Old associates have no right to question his motives or to reflect upon his conduct.

The right to exclude from an association a member who openly violates its laws, no one will question. In this quiet method of purification a society possesses a great advantage over the state. Governments have successively tried the most varied expedients, ranging between extreme leniency and extreme cruelty to secure obedience from subjects. Success has always been partial because punitive measures fail to eradicate evil propensities. Fear may restrain from overt crimes, yet malcontents remain within the national borders, and if chance gives them power, may strike the parricidal dagger into the heart of their country. More empires have fallen through internal treachery than the might of foreign foes.

When, on the other hand, a voluntary association removes a member, the separation is complete. By pruning the branches the symmetry of the tree is preserved. Disaffection, the fruitful germ of discord, departs, leaving behind harmony and united strength. Efforts are not distracted by jarring councils, nor is time lost or thought con-

sumed in applying remedies to domestic wounds. All the talent of the society is ready for employment in the far happier work of improving present methods of usefulness, or devising better methods to take their place.

If our motives for enforcing the terms of a code were selfish, we might be justly liable to censure. But that reproach can not be laid at our door. It is the province of medicine to attach her ministering servants to the forlorn hope of the army of philanthropists. They move to the contest prepared to suffer every hardship and brave every danger, to secure for others boons too often denied to themselves. When charges of bigotry and illiberality are thrown in our teeth, we can with clean hands and swelling hearts point to the deeds of our brethren. Let the destroying angel flap his pinions over the turrets of the city. Let pestilence come, and in a night, without heralding his approach, or pausing to knock for entrance, cross alike the threshold of stately mansion and filthy hovel. Shafts of death fall everywhere. Merchant-prince and needy laborer, blooming maiden and grey haired sire, are indiscriminately struck by the fatal barb. The destroyer sways a terrible sceptre, showing no deference to the sage, no respect for the mighty, making no obsequious bow to wealth, yielding no homage to beauty, nor even offering pity to the poor creature of affliction whose cup already is crowned with sorrows. Around fashionable squares the door knobs are hung with the sable knot of mourning. Yonder quarter, that a few days agone contained many happy homes, is buried in grief too deep for utterance save in muffled sobs. From the haunt of vice comes the mingled wail of lamentation and despair as the wretched victims of sin curse God and die. The hum of business is hushed. Highways no longer rattle with the wheels of industry, and the sound of hoofs but marks the progress of funeral trains. Whoever can, hurries to escape from such scenes of desolation and woe. Child-reft parents, orphaned children, widowed wives, leave behind their buried treasures to seek safety for what remains.

But *one* class never join the flight. True, unfaltering, the physician is present in the thickest danger, opposing the ravages of disease, turning the scale in favor of life as the balance hangs quivering, or if the fatal crisis be past, easing the pangs of dissolution. As one and another fall and are borne away to the silent chambers of the dead, others unasked step forward to fill the broken ranks, and too often to share a similar fate. When we think of the noble men who at the call of suffering have rushed to almost certain doom, of the

thousands who have voluntarily laid their own lives upon the altar for the preservation of others, we thank God that in the vineyard given to the medical profession for tillage, such heroism and such self-devotion are natural products of the soil. Where else can the like be found? As the soldier moves to battle, his senses are intoxicated with the strains of martial music, the waving of banners and all the gorgeous pageantry of war. In the wild excitement of fight the coward forgets his fears. With the physician how different! Instead of the tumultuous swell of music, he hears the moans of the dying! Instead of gay pennons he sees the coffin and the crape; instead of the triumphal march, solitary hearses hurrying the dead to the grave.

The occurrence of plagues or pestilence only render more conspicuous the heroic virtues and self-denials everywhere practiced in the physician's ordinary round of toil. In the morning he starts upon his endless circle of duties with no assurance that evening shadows will bring rest to wearied limbs. Burthened with the responsibilities of life and death, he bears the heavy weight through summer heats and winter storms, midday suns and midnight gloom. Sisyphus struggling ceaselessly to roll the rock to the mountain top and find release from his "long labor," hardly exaggerates the self-imposed fate of the physician. His work is never ended. Notwithstanding the multiplicity of hardships willingly borne, notwithstanding the individual surrenders his time, his talents, his very *liberty* to the public, notwithstanding the ever-recurring responses to the calls of charity, and the cheerful performance of countless tasks for no earthly recompense, he is still accused of selfishness and illiberality! The noisiest in flinging the charge are those who have reared sumptuous palaces and live in magnificent ease on the wealth beguiled from millions. Singular accusation, considering its source and its objects!

The gratuitous attacks made upon our society must be my apology for thus digressing to show that the imputation of low or sordid motives is as ungenerous as unjust.

While we meet together to interchange words of friendship and cheer, to mutually strengthen hands and hearts, we should also investigate patiently, dispassionately, and earnestly, the *status* of the profession, the dangers that threaten, and the obstacles that oppose. All human institutions are imperfect, nor have we the presumption to claim for ours any exemption from the common lot. Yet there is an ideal excellence to which noble impulses aspire. As Bunyan's pilgrim, gazing afar from the Delectable Mountains, dimly discerned the

gates of the Celestial City and caught a glimpse of its glory, so peering into the mists of futurity, with the eye of faith we may see the votaries of the healing art widening and deepening their knowledge, and purifying their aims as time rolls on, till the present morning twilight shall ripen into perfect day. The road may be long, and many successive generations find graves by its side. At whatever point Providence has stationed us, whether near the goal or distant by wearisome leagues, it behooves us, since precious interests are intrusted to our charge, to labor faithfully in our day, adding what we can to the cumulative light that shall at length leave no dark corners where ignorance or deception may lurk in safety.

If individuals are tried by a proclivity toward "besetting sins," the different pursuits of life also are each exposed to peculiar temptations. The code aimed a deadly blow at an evil which formerly impeded greatly the advancement of medical science. We refer to the jealousies and contentions of professional neighbors. Dissentions may arise in numberless ways. The respective friends of physicians occupying the same territory, are often extremely officious in partisan interference. Accident often temporarily throws the patient of one into the hands of another. Frequently the sick, disappointed in expectations of sudden cure, abandon their former attendant to seek counsel and remedies from a rival. Sometimes the doctor by relinquishing a hopeless case subjects his course of treatment to the animadversions of a successor. Consultations, too, have been conducted in a manner suited to insinuate the poison of distrust into the minds of a confiding family—not always by words or overt acts, but through the more subtle medium of significant looks and gestures. In many cases there is a collision of interests. In others the force of circumstances gives an individual the power, if he is disposed to use it, to reflect injuriously upon the skill of his competitor. Were the question of duty now referred to the arbitrament of conscience, inclination might prove a most persuasive advocate. A person judging in his own cause is apt to make a loose application of the golden rule. If he presses advantages discourteously, the unsuccessful party, equally biased in deciding on the merits of the controversy, regards himself as the victim of unpardonable injustice. A slight breach widens into marked alienation, and under the influence of mutual irritation and innuendo, alienation may develop itself in life-long enmity.

But we may congratulate ourselves on the fact that this evil, once seemingly incurable, has almost wholly disappeared through the

beneficent workings of the code. That has prescribed an honorable method of procedure, suited to all the contingencies of medical practice. So equitable are its requirements, so forcibly do they appeal to the conscience, that disagreements between those who have accepted it as a rule of conduct, are well nigh impossible. That its generous provisions for the security of good-will were at once adopted by acclamation everywhere throughout the United States, shows how deep and strong was the under-current of genuine charity flowing calmly beneath the surge above.

The general observance of rigid rules of ethics and etiquette offers the most available means of counteracting the pernicious results consequent on the multitude of our educational institutions. State legislatures by injudiciously chartering medical schools have the ability to work unlimited mischief. If competition developed itself solely in endeavors to afford the best facilities for instruction, complaints would be groundless. Such, however, has not been the case. In efforts to gain students, higher aims have fallen prostrate before the whisperings of ambition. Whether struggling doubtfully for existence, or entering the lists to excel in the presentation of a long array of names, our colleges are strongly tempted to lower the standard of qualifications in order that the dread of rejection may drive none away to swell the ranks of less scrupulous rivals. This more than all other causes has antagonized the exertions of the American Association to render the possession of high attainments and thorough culture indispensable to the award of the diploma. The only hope of reformation lies in the reiteration of powerful appeals to the conscience. And in the gradual enlightenment of conscience we put great trust in the widespread diffusion of the sentiments embodied in the code. While many in conventions and with the pen are eloquently urging the claims of education, this leaven, disseminated far and near, is also working silently in the popular mind. Since lessons of duty are thus inculcated, we may indulge the confidence that all will soon unite in decreeing that henceforth none unworthy through deficiency of virtue or knowledge shall receive the honor of our degree.

Owing to the laxity of the present system of medical instruction, and the ease of graduation, currency has been given to the false notion that a slight smattering of general information constitutes an ample preparation for attendance upon lectures. The mistake is preposterous. Indeed to embark in the study of a science or combination of sciences, so profound in principles, so comprehensive in relationships, so subtle in reasonings, sciences to which no truth in

the broad domain of physics is foreign, and to which the most interesting departments of metaphysics are closely akin—to commence such studies with the faintest assurance of making high attainments, one should bring to the task a mind trained to deep and patient thought. Familiarity with departments of abstruse learning is not absolutely necessary to qualify the physician to discriminate diseases or administer remedies. Yet if he would elevate his labor above mere drudgery, if he would extend an influence beyond the narrow circle of his daily toil, if he would contribute his mite to swell the total aggregate of knowledge ever enlarging as the generations of men pass on; if, in short, he would be a true man, true to the dignity of his calling and the interests of humanity inseparably involved, he must improve to the fullest every faculty which God has given.

While a goodly proportion of the number annually admitted to the honor of the doctorate are thorough scholars, others go forth from the schools with the meagerest mental outfit. So long as access to the ranks of the profession continues as easy as at present, it would be idle to imagine that *all* at the time of graduation are duly impressed with the nature of the moral obligations imposed upon the practitioner. Coming from all classes of society and all the various occupations of life, they are wholly unacquainted with the ethical relations of the pursuit they have chosen. During the period of pupilage the ordeal of the green-room occupies infinitely more thought than the severer ordeal beyond. That imaginary whirlpool passed, the beginner enters the wide world to encounter trials, vexations and hardships. In the absence perhaps of friendly counselors, with no extrinsic support to lean upon, the youth, aroused to the full realization of the difficulties encircling his pathway, discovers the need of a chart. If the code is now placed in his hands and he follows the guidance of its teachings, it will prove at once both a weapon of deliverance and a shield of defense. If unpleasant occurrences have revealed the poverty of his moral resources, and his mind is enveloped in doubts, the code will disclose the way of exit from the maze of perplexities. If he is plodding unambitiously onward, never thinking upon, and therefore never caring for the broad ethical principles which underlie all that is most beautiful, and generous, and ennobling in medical life, the perusal of its precepts may awaken the thrills of a new-born love.

The code has scattered good seed in every section of our country. Returns of ten-fold, thirty-fold, sixty-fold, according to fertility of soil, have already rewarded the diligence of the sower. In highly

cultivated communities its power has been more marked, because the omnipotence of public sentiment, expressed and enforced by the influential members of the profession, has compelled loiterers to quicken step or fall hopelessly behind. In isolated quarters remote from the great working centers of intelligence, the process of germination is slower. Yet the mass *si non passibus æquis*, if not with equal pace, are moving onward in obedience to one mighty impulse. Not only has the National Association, by great ingatherings and soul-stirring appeals broken the slumbers of the lethargic, and awakened dormant energies, and from its warm heart sent the gushing blood of life to the remotest capillaries, causing every artery to pulsate with the beats of renewed existence, but has still further given completeness to its plan by elaborating for a law of development a code, the purest that virtue could conceive, the most perfect that the united intelligence of the wisest could devise.

Paul the apostle says, "I magnify mine office." The *honor*, as well as the purity and beneficence of that office were dear to the veteran soldier of the cross. He wore its sacred vestments, and approached its sacred mysteries reverently and affectionately. That example is worthy of all imitation, and deeds, not words, are the appointed means. In pursuit of this end it is incumbent on the physician to exhibit the benignity of the profession in kindness of manner and integrity of conduct; to preserve professional trusts inviolate; to avoid remarks reflecting on brethren or the faculty at large; to shun representations that may induce doubts in the popular mind respecting the efficacy of the healing art; and to keep clear of all participation in the counsels of men whose course is founded in secrecy or deceit. As our system is based upon no exclusive dogma, but embraces every method of cure proved by experience to be really valuable; as it tolerates no concealment of remedies, but requires their unbought publication for the common good; as it denounces artifice and imposition in every form, whether gilded with the show of great names or employed by the petty trickster; and as it has clearly enunciated these principles in the form of rules, no one can find an apology to cloak dishonorable or equivocal practices. The walk of the physician should be pure and truthful, marked by earnest zeal to discharge every duty well, that when summoned from his stewardship he may appear with a clear conscience before the bar of God. He should cultivate assiduously the intellect and the heart. Then, in devoting all his ennobled faculties to the relief and melioration of mankind, he will at the same time most effectually "magnify the office" of his choice.

HYGIENE.

A Dissertation read before the Annual Convention of Fellows of the Connecticut Medical Society, Wednesday, May 23d, 1860.

BY A. B. HAILE, M. D., OF NORWICH.

MR. PRESIDENT AND GENTLEMEN: Of all the professions which have engaged the attention of men, that of the Physician has, in all ages and by all nations, been considered one of the most important and honorable. Its functions reach, and seriously affect, the well-being of man in all his varied relations, not only to this life, but also to that life which is to come. Through the instrumentality of the body only, do all the physical, mental, social and moral powers of every human being operate and manifest themselves. Without this physical organism, man is no longer man. Let any one of the functions of the body be destroyed, or suspended, or even deranged, to any considerable extent, and the man is changed in all his relations and responsibilities, both to the animate and inanimate world. Hence, the importance attached by all intelligent minds to the studious preservation of the body in a normal and healthy condition.

To the care of the Physician is this physical and potential part of man's nature committed. For him it is, to guard this citadel of all man's powers. For him, to repel the approach of every foe; to expel whatever enemy may enter; to warn of every danger, and to guard, with untiring zeal, this sacred trust. Too often have Physicians, entertaining but limited views of their calling, restricted themselves to efforts for the *cure* of disease, entirely overlooking the more philanthropic and noble office of forestalling and preventing it: and it will be my object, in the following remarks, to call the attention of my professional brethren to the importance of Hygiene.

Hygiene is the science of health, and properly embraces the consideration of whatever conduces to health, or prevents disease.

In order the more intelligently to discuss this subject, we will, in the first place, advert for a few moments, to the predisposing causes of disease. These may be either hereditary, or accidental. The hereditary or congenital predisposing cause is, that peculiar status or condition of the vital orgasm, imparted by parents to their offspring, which, under circumstances favoring its development, results in disease. This hereditary predisposition to contagious and infectious diseases, evidently exists in the great majority of the race. The accidental predisposing causes of *epidemic* diseases have thus far been investigated with but little success, notwithstanding all the efforts made by the most patient and accurate researches of the most able minds. The subject is one full of interest, and affords a wide field for investigation. But, however imperfect our knowledge of the predisposing causes of particular epidemic and endemic diseases may be, the fact is patent to all close observers, that whatever impairs the vital energies of the system, acts no unimportant part in exposing the unfortunate victim of such impairment to the ravages of the various diseases of whatever name or kind, with which he may be brought in contact. History proves, beyond a doubt, that the attacks of severe diseases are most numerous, and the fatality most appalling, among those whose vital forces have been impaired by various causes of debility and prostration, and that such persons are the greatest sufferers, not from epidemics only, but also from endemic, sporadic and hereditary diseases, and from mechanical injuries. Among these causes, the most prominent are, excessive indulgence in the use of intoxicating drinks, improper or insufficient food, deficient clothing, impure or vitiated air, excess or deficiency of muscular exercise long continued, anxiety and depression of mind, debauchery and vice. The above mentioned circumstances, and, in a sense causes, of disease and death, together with many others that might be mentioned, are not confined to the lowest classes; but in more elegant, though not less destructive forms, are they found in all the higher grades of the community. Whenever the system becomes enervated and the vital powers depressed, the individual falls an easy prey to disease. The citadel is dismantled, and may be entered without resistance and razed to its foundations. Could these enervating and depressing agencies, and the consequent condition of system induced by their presence, be avoided, it can notbe doubted that the average of human life would be increased, so that the duration of the life of man, instead of being, as at present, one third, would become more than one

half of a century. Now, all the above named causes of debility and prostration can obviously be avoided. A comparatively pure state of the atmosphere can, with proper care, be maintained in the city, as well as in the country; within, as well as without, our dwellings, and work-shops, and school-rooms, and places of public gatherings. Sufficient and proper food and clothing are not beyond our reach, especially in this country. Intoxicating drinks can and ought to be restricted to their appropriate use. Muscular inactivity and excessive mental effort, begetting effeminacy and debility of the vital powers, can be avoided. Indeed, the whole host of practices and habits which are sapping the very foundations of our physical strength, reducing so many of our people to mere apologies for men and women, and making them and their children an easy prey to disease, and which, if not checked and withstood, will ultimately destroy us as a nation, can be avoided.

Most, if not all diseases, called hereditary, are, it can not be doubted, acquired, and, once acquired, maintain their hold on the system during succeeding generations, mainly, because the same or similar agencies which first induced the condition, on the part of the parents, continue to operate on their posterity. The question is often and properly asked, "Why are scrofula and consumption, so prevalent, becoming more and more so every day?" "What is the cause of it?" The above considerations will, I believe, aid us in giving a correct answer to the question. I would say, it is the constant and accumulative power of removable agencies, practices and habits of both body and mind, that from generation to generation, depress the vital forces of the physical system. And we may safely predict that this scourge of our country will not only continue, but increase, in a geometrical ratio, until by sad experience, we are taught the wisdom of conformity to the laws of health. Indeed, no intelligent Physician can doubt, that, if the laws of Hygiene were thoroughly understood and scrupulously observed, cases of severe sickness and premature death would become comparatively rare; or that hereditary predisposition, (except in cases of contagion and infection,) rarely developing itself in the form of actual disease, would ultimately disappear. We have, then, here, a field of effort sufficiently broad and encouraging to engage the energies of the most active and philanthropic, viz.: that branch of Hygiene whose office it is to remove those known and removable agencies which are constantly, though in most cases, silently, at work, eating out the stamina of the public health, and destroying a once manly and athletic race.

Having premised these reflections on the predisposing causes of disease, let us now revert to the subject proper, under consideration. In the following remarks, however, I shall confine myself to reflections upon two departments only of this great field of inquiry:

First. The air we breathe, and some of the sources of its vitiation.

Second. The exercise and rest of Man's Physical, Mental, Social and Moral nature.

First, in relation to the Air we breathe.

The first want of all animated beings maintaining an independent existence, is, air. The infant's first struggle is for this life-giving fluid. This it must have, or perish at the moment. Nothing can be substituted, and every moment renews the necessity, until life is extinct. To supply this necessity to the myriads of living creatures that inhabit the globe, the all-wise Creator has provided a vast ocean of the vitalizing agent, with a pressure sufficient to cause it to permeate all permeable bodies, and thus to reach and supply the wants of all, even the most minute; and the balance between the animal, vegetable and chemical forces is so accurately adjusted, that the Hygienic condition of this all-pervading life principle is not, except in particular circumstances, vitiated to any appreciable degree, or rendered unfit to answer its grand design. And yet, man, in ways innumerable, contrives so to vitiate and defile this necessity of his existence, as to bring "death into the world," and no small part of "all our woe." Of all the antecedents to sickness and death, nothing so often, and so effectually, prepares a highway for the destroying angel, as a vitiated and poisonous atmosphere; particularly in our cities and dwellings. How often does the city Physician, in passing from street to street, and from house to house, to do what he can to relieve the sick, the suffering and the dying, meet the very causes of such sickness and suffering and death, in an atmosphere so impure and offensive, as to make him feel that his services can be of little avail, and must soon terminate in mingling his sympathies with the bereaved! How certainly does he know the particular streets, and with what accuracy can he, in many instances, point out the identical houses, where he will be summoned, most frequently, to witness such fearful proofs and stern rebukes of man's criminal neglect and folly.

The idea of sanitary precautionary measures has never seriously entered the minds of the great majority of the inhabitants of our cities. In confirmation of this, witness the slaughter-houses, tanneries, soap-manufactories, bone-boiling and poudrette establishments;

gas-works, stables and sties; vaults overflowing; cess-pools scarcely covered; open gutters used as sink drains, obstructed aud half filled with putrid and decaying animal and vegetable matter; piles of the shells of oysters, lobsters and clams—many containing the dead and rejected animal, and all retaining sufficient of the animal to make the whole mass most offensive; the carcasses of various kinds of animals, thrown into the street, and there allowed to remain until decomposition has removed the nuisance; and the masses of rejected and decaying vegetables and offal of every description; the whole, fervid and festering under the heat of an August sun. From all these sources, are rising, from day to day, and from week to week, Ammonia, Hydrosulphuret of Ammonia, Carburet and Sulphuret of Hydrogen, Carbonic Oxide and Carbonic Acid, together with myriads of organized molecules which constitute the most fatal forms of such emanations, all of which, when inhaled, even in a largely diluted state, are destructive to health and life. In certain localities, these nuisances are absolutely insufferable, for any length of time, except by the squalid and sickly victims, whose senses have been deadened by the curse, and who know no better lot. In this connection I would mention a practice, in some of our cities and villages, during the hot and dusty weather of the summer months, which, though designed to add to the comfort of citizens, is, I apprehend, productive of much more evil than good. I refer to the practice of sprinkling or wetting down the streets, in order to lay the dust. Now, the dust of our city and village streets consists, we all know, of a large proportion of animal and vegetable matters, in a comminuted state, mixed with the earthy particles. While in a dry condition, very little decomposition takes place; but when moistened, chemical action, under the influence of the sun's heat, immediately ensues, and large quantities of deleterious gases are evolved, which poison the air, not only of the streets but of our private dwellings. There is also a practicc common to farmers, in some of our rural districts, which can not but be detrimental to the health of those within its influence. I allude to the use of fish as a fertilizing material. In the decomposition of these fish, immense volumes of the most fetid gases are set free, which often contaminate the air for miles in extent. A sufficient covering would abate the nuisance and save the manure.

The air within our dwellings must, in the nature of the case, partake of all the impurities of the atmosphere without. Additional sources of vitiation, however, here present themselves, viz.: respira-

tion, cutaneous transpiration combustion, for purposes of illumination, and not unfrequently, fermenting and decaying animal and vegetable substances in neglected and undrained cellars, and damp walls covered by successive paperings containing farina, gluten and albumen, in a state of decomposition. There is one other source of deterioration of the air of our houses, heated by close stoves and, the so called, hot-air furnaces, which I would propose as a subject of investigation. In what the evil consists, I have not been able to satisfy myself; but that air, at a given temperature, thus heated, produces upon the system an effect different from that heated by other usual methods, I am fully convinced. Air heated by close stoves and furnaces produces in many persons, an exceedingly uncomfortable state of the head. There is, apparently, a slight congestion of the brain, and a manifest distension of the veins and capillaries of the face and head, accompanied, in most cases, by cold extremities. The ill-effects of such a state of the air are usually ascribed to high temperature and dryness; but this does not seem to be a satisfactory explanation. The above mentioned sources of vitiation of the atmosphere, both within and without our dwellings, exist, though to a far less extent, in the open country; and so far as they do exist, exert their appropriate influence upon the sanitary condition of the people.

Respiration, and combustion for the purpose of illumination, are the two universal, and, as a general thing, most efficient causes of poisoning the air within our dwellings and places of public concourse; but in the dwellings of the vicious and degraded poor, where many individuals are crowded into small apartments, the combination of other causes is far more potent in producing that enfeebled condition of system which exposes the subject to attacks of disease in every form.

How uniformly is it the case that, in crowded assemblages, more especially in the evenings, when artificial illumination becomes necessary, and at private social gatherings, particularly in the winter season, when the doors and windows are necessarily kept closed, the air becomes so vitiated by the presence of carbonic acid gas, as to be offensive to the dullest perceptions, producing, upon all, a manifest depression and lassitude, and upon the more susceptible, vertigo, cephalalgia, and even fainting, followed, in some cases, by protracted and severe hemicrania, and in others, by a prostration which is not recovered from for days. How many of our school-rooms are entirely destitute of all proper means of ventilation; so that, both pupils and teachers are compelled to breathe, over and over again, the confined

and heated air, until it is so loaded with poison, that the necessity of relief from its toxical effects becomes urgent and absolute. The windows or doors are thrown open, and, in this half-dead, sweltering condition, our loved ones are subjected to an almost instantaneous change of temperature from eighty or ninety degrees, Fahrenheit, to zero,—an exposure, hazardous to the most robust, and, not unfrequently, proving fatal to young and delicate children.

Now, with all these agencies incessantly and actively at work, producing an atmosphere of death, in which, like drowning men, we struggle for the breath of life, is it possible for any community to live from year to year, and from generation to generation, without feeling the effects of such disregard of the laws of Hygiene? Is it strange, that infantile life, so frail, so susceptible, should, in so many instances, find the struggle too great for its feeble powers? Is it not strange, rather, that so many of our children do attain to adolesence and maturity? Is it a matter of surprise that, under the circumstances, our city population should want that manly vigor of both body and mind, and of morality too, which characterizes those of the race, not subject to such influences? Or, that the bills of mortality are so long, and life so short? All observation proves, that, as a general rule, feeble parents are not blessed with healthy children; and that the number of births in a community, is in proportion to the Hygienic condition of that community; so that, in accordance with an unalterable law of the Creator, such a people must ultimately become extinct and give place to those who are wiser and better than their predecessors.

We come now to the second branch of our subject, in which I propose briefly to consider the exercise of Man's Physical, Mental, Social and Moral nature, in some of its Hygienic relations.

And first, of the exercise of Man's *Physical* powers:

It is an established law of our being that, without effort, continued, patient effort, man rarely accomplishes anything beneficial to himself or to his fellows. No man can think methodically and effectively, write or speak eloquently, conduct himself dispassionately, wisely and benevolently, without long continued, earnest effort. Precisely so is it with our physical system. No man or woman can have a sound, efficient body, exhibiting a perfect development of the physical, without appropriate and vigorous exercise; but with it, experience proves, that all the functions of the body are performed in a normal and perfect manner. The excretories of the skin are excited, the lungs expanded, and the blood aerated; the peristaltic action increased; the

movements of the heart and arteries rendered more vigorous, and the absorbents excited to take up and carry off more rapidly the effete and worn-out particles of the various tissues, calling for more activity in the secernents and capillaries, to replace with fresh, vitalized material, the waste thus occasioned. Thus a demand is created for food which the stomach receives with avidity, and digests with ease and pleasure; and the whole body is kept in a fresh, active, and healthy condition. Instead of a feeble, sallow body, made up of stale, worn-out material, which ought long ago to have been removed, but which, from lack of vital energy, remains to clog and poison what is left of life, we see manly vigor and activity, the beauty of health, the smile of contentment and love, and the joy of hope. Among which class of persons do we find the great majority of cases of melancholia, hypochondriasis, dyspepsia, and scrofula, in all its forms, and indeed almost every form of chronic disease? Is it among those who take abundant, out-of-door exercise, in the pursuit of some satisfactory occupation? Or, is it among the sedentery, shut up in impure air, who are thus suffering the penalty of a violated law? On the contrary, there can be no doubt, that too much muscular effort tends to depress the vital powers and expose to disease; but the danger in this direction is, I apprehend, much less than in the opposite. Most prominently do the deleterious effects of inactivity and confinement manifest themselves in the children and female portion of our city population. Children are naturally active; they love to run and frolic, and will resist, to their utmost, confinement within doors, and often take the risk of punishment, rather than forego the gratification of Nature's impulses towards physical development and well-being. In our cities and larger villages, little provision is made for the amusement and physical training of our children. Safe and appropriate play-grounds are so few and far between, that the advantages of them are available to a small portion only of the whole number. Permitted, now and then, to go into the streets, those of the more wealthy, refined and fashionable, are often dressed in such a manner as to restrain the natural movements of their bodies, and, attended by a nurse to protect them from accident, are taught to walk in a very proper manner, taking special care not to rumple or soil their elegant attire; or else, taken into a carriage for a drive, like encaged birds, they are restless and dissatisfied, and long for freedom and the exercise and sports appropriate to their age and nature. Once allow them, with companions of their age, the privilege of an open field or park, and how changed the scene! How boisterous their mirth! How wild their

delight! Their eyes sparkle with joy, and their cheeks glow with a healthful excitement. Nature asserts her dominion, and they are happy.

The preceding remarks have a forcible application to the adult, and more especially the female, portion of our city population. How little invigorating exercise do a majority of the women of our cities enjoy. Cares they have in abundance, and depressing ones, too. The fashions of the day, the conventionalities of society, and the circumstances with which they are surrounded, impose upon them, in the form of dress, etiquette, unfaithful servants, sickly children, and a thousand nameless household perplexities allowing of no healthful physical exercise, a burthen too heavy to be borne. The consequence is, a weary, sorrowful life, and an early grave. This want of free, out-of-door exercise is felt in greater force by a large class of females in our cities, whom necessity compels to incessant toil in various sedentary occupations. Their pale countenances, languid movements, and listless address, all testify to a fatal want of physical exercise. The condition of the men, except those engaged in some mechanical occupation, can hardly be said to be better. Is it surprising, that a population, growing up under such a regimen, should become enfeebled and imbecile, and that disease and death should claim them as early victims?

Secondly. Exercise of the mental powers. In the exercise, or rather rest, of our mental powers, there is urgent need of reformation. As a people, I believe we tax our intellectual faculties too severely. The mind is too much on the stretch, and too little time is devoted to relaxation and diversion from its every-day toil. Men are altogether too eager in the pursuit of wealth and power; too earnest in the speedy accomplishment of their favorite objects, and too impatient of delay. Physicians know well, that the brain, of which all thought is the function, is in constant and active sympathy with the whole organism, and that, if it be overwrought, the whole system suffers; that prostration of the vital energies, as certainly and necessarily follows, as when the individual has been subjected to any other cause of debility. Rest of the brain is quite as necessary to health, as rest of the muscles, or any other part of the physical system. In perfectly healthful and natural sleep, there is an entire suspension, not only of the action of the brain, but of every other bodily function, except those dependent on the nerve of sympathetic motion of the nutritive system, and even these are partially suspended. But without cerebral repose, there is no natural, healthful repose of any part of the system. This is often illustrated in cases of delirium and insanity. Thus it is, that by continued mental

effort, the whole body suffers from debility and prostration, and is rendered more susceptible to disease. Indeed, the connections and sympathies of the brain with the nutritive system are so intimate, and their dependence upon each other so perfect, that we can not do violence to the one, without a corresponding injury to the other. This important fact is established by almost daily experience. How often are we consulted, professionally, by persons whose minds are so constantly and anxiously occupied in their daily avocations, that their health has been materially and sometimes fatally compromised. Such patients are not confined to any one class. We find them in almost all classes and grades of society.

And here, allow me to call attention, for a moment, to this excess of mental exertion, as often existing in individual cases, in our public schools and higher seminaries of learning. The subject of education has justly excited a deep interest in many sections of our State, and led to gratifying efforts to perfect our schools and secure the most efficient means for the thorough education of our children. With such facilities, both parents and teachers naturally feel a strong desire that the children should make rapid progress in their studies. The pupils are urged forward by their teachers, in some instances, beyond their capacity. Emulation, love of approbation, or fear of disgrace, often stimulates such children to exhausting application to their lessons during the hours that should be devoted to athletic sports or necessary repose. The result is, failure of health and discontinuance of their studies.

Thirdly. The exercise of man's social nature. The social element of man's nature is universal, and its influence upon his health and well-being can not, in the discussion of this subject, be ignored. This, if we except the moral or religious element, is the highest source of happiness to man, and he can no more violate its dictates with impunity, than abstain from food or from sleep with impunity. In just so far as he gives a wrong direction to his nature, in this respect, in just that degree is he unhappy, and continued unhappiness is a sure precursor of disease. Let this part of man's nature be properly developed, and he becomes a philanthropist, a patriot, a kind and obliging neighbor, an affectionate husband and parent, and a sympathizing friend, ever ready to cheer the desponding and relieve the suffering; but if he suppress or crush out this emanation of the Divine, he becomes a misanthrope, a recluse, selfish, unmerciful and cruel, a miserable fragment of humanity, dissatisfied with himself, and a prey to ennui and melancholia. He has no object in life, and premature disease and death close the scene.

Finally, let us consider for a few moments, the exercise of man's moral or religious nature in its relations to Hygiene. We have it by the authority of Inspiration, that men are subject to death because of sin. If this assertion of Holy Writ be true, it would seem a fair conclusion, that if man were always true to correct moral principle, disease would be diminished and life prolonged. Could we obtain correct and reliable statistics of the relative longevity of truly moral and immoral men, they would, I apprehend, teach us an exceedingly interesting and instructive lesson on the subject of Hygiene. One fact is familiar to the observation of every experienced physician, *to wit*, that some of the most fatal and wide-spread diseases that afflict suffering humanity, result directly from immorality. Were the divine precept, "Do unto men as ye would that they should do unto you," to govern men in all their relations to their fellow-men, how changed would be the condition of the race, as regards disease and death! Call to mind the pestilence that, in time of war, stalks abroad and claims its thousands of victims from the marshaled hosts, or from the starved inhabitants of the beleaguered city. Consider the brevity of human life in those countries where oppression and wrong reduce to want and degradation the miserable subjects. Think of the imbecile and sickly children of intemperate and debauched parents, whose hapless lives terminate in premature death. Then again, in addition to these objective developments of immorality, we should consider that the subjective state or condition of mind is such as to render the immoral man more liable to disease than the morally upright. He has not the composure, self-control and cheerful hope, under the trials and disappointments of life, that are favorable to health; and in sickness, he is more commonly apprehensive, discouraged and alarmed, all which conspire to depress the vital energies and lessen the probabilities of recovery. He is also more liable to fall into evil habits, which entail disease upon himself and his posterity. Follow out the effects of immorality, in any form, and mark its influence upon the health of its votaries, and say, if the abuse of man's moral nature be not the most prolific cause of sickness and premature decay.

Indeed, the moral element of Hygiene exerts its influence upon all individuals, in all countries, and has done so since man's first transgression, and it will, in all probability, be the last to be perfected.

Having thus very briefly, and I need not say imperfectly, considered the relations of the air we breathe, and of man's physical, intellectual, social and moral nature to the subject of Hygiene, may I be permitted, in conclusion, to appeal to the physicians of the good old State of Connecticut, to unite their efforts for the removal of the evils

to which reference has been made? To whom could the subject be more appropriately referred? Who are better qualified to appreciate its importance, or instruct the people, and judiciously direct them in efforts at reform? As I have elsewhere stated, the people are uninformed on this vital subject. Let us, then, scattered as we are over the State, in every town and city, familiar with every street and house, at once enter upon the work; point out the various sources of vitiation of the air; enforce the necessity of their immediate removal; impress upon the authorities of cities the advantages of a thorough system of sewerage, and drainage of all low and marshy grounds in the vicinity; the importance of paving the streets, and the danger of allowing the gutters, or slightly covered cess-pools, to receive the drainage from sinks; and the absolute necessity of an abundant supply of pure water. Let us earnestly represent to health committees, the danger of neglected vaults, and of allowing the streets to be made public depots for all kinds of garbage and offal. And let us, by the presentation of facts, demonstrate to all, that the keeping of swine, the slaughtering of animals, the tanning of hides, and all similar processes and occupations are nuisances in any city, and ought at once to be abated. In all dwellings, and especially all places of public gatherings, and in school-rooms, the benefit of thorough ventilation and the danger from its neglect should be earnestly set before the minds of the people. Let us also have a care to the habits of physical exercise of our friends, and of all to whom our professional responsibilities extend. Let us urge upon the sedentary the necessity of systematic exercise in the open air; and let us encourage the opening of public parks and play-grounds for children. Let us more thoroughly investigate the mental habits of the people, and especially of children, and advise and caution against excess. The man of business often needs a friendly warning against over-work. As a people, we work too much and play too little; and we should therefore recommend more relaxation and amusement. All the above, and a thousand other considerations, demand our constant attention.

In short, let us be good and true men, intelligent, active, earnest advocates of all that conduces to public health, until there comes to be a public sentiment that frowns upon every violation of correct Hygienic principles. So may we hope to be remembered by generations to come, as philanthropists and public benefactors who have not lived in vain. More than all, shall we have the consciousness of having done what we could, to ameliorate the sufferings and augment the happiness of our fellow-men.

SANITARY REPORT.

BY L. S. WILCOX, M. D., HARTFORD.

MR. CHAIRMAN AND GENTLEMEN OF THE HARTFORD COUNTY MEDICAL SOCIETY:—THE Sanitary Committee, appointed for the year 1859, would respectfully report: That they have been able to obtain but small material for an intelligent and discriminating statement of the Sanitary condition of the county during the past year.

Circulars were sent out, as usual, to the physicians. In these circulars, attention was directed particularly to Tubercular Phthisis, special points of interest being indicated. The committee hoped, by thus limiting and defining the field of inquiry, to obtain more precise and important information than they would obtain should they open the whole subject of medical investigation. The history of any cases of interest, or of any epidemic, was also solicited.

But the whole county has been as silent as the grave. Indeed, we have been left to question the dead. For the "muffled drum," and the "funeral note" in the "dead march," have alone responded to our inquiries.

The elaborate mortuary tables prepared by the State Librarian, together with those prepared by the several mortuary committees of this city, have yielded us the following suggestive summaries. If our circulars came home "weeping," these mortuary results speak to us most impressively. In medicine, if not in religion, we profess to hear one from the dead, even though we despise Moses and the Prophets.

The whole number of deaths during the year 1859, was 1,331. Of these, 255 occurred before the second year; 190 from one to 5 years; from 5 to 10 years, 65; 10 to 20, 74; 20 to 30, 141; 30 to 40, 116; 40 to 50, 76; 50 to 60, 88; 60 to 70, 105: 70 to 80, 123; 80 to 90, 65; 90 to 100, 8; age not stated, 10; males, 649; females, 667; sex not stated, 15.

These deaths were, from zymotic diseases, 325; from diseases of un-

certain seat, 119; nervous organs, 185; respiratory organs, 300; circulatory organs, 36; digestive organs, 74; urinary organs, 7; generative organs, 27; locomotive organs, 7; integumentative organs, 2; old age, 56; violence, 74; unknown, 79; still born, 40. Of the forty still-born, twenty-three were returned from Hartford, seventeen from the country towns. The per centage of still-born to the whole number of births, is for Hartford, 2.76; for the country towns, 1.19.

We propose to set forth in comparison, the city and country, in respect to the deaths of children under five years, and for this purpose, we have prepared the following table, exhibiting the deaths of children under five years, occurring respectively, in the entire county, the city, and the country towns, during the five years ending in 1859, and their per centages to all deaths from known causes during the same period.

TABLE.

	Deaths from unknown causes.			Deaths under five years.			Percentages.		
Years.	County.	City.	Country.	County.	City.	Country.	County.	City.	Country.
1855	951	263	688	348	101	247	36.6	38.04	35.9
1856	1062	300	762	455	151	304	42.84	50.33	39.89
1857	1188	397	791	491	173	318	41.33	43.58	40.2
1858	1269	369	900	517	168	349	48.62	45.47	38.78
1859	1212	399	813	458	199	259	37.79	49.87	31.86
Average per centages for the five years, . . .							41.43	45.46	37.33

It will be seen by this comparison, that the number of deaths of children at five years and under in this city, is more than eight per cent. larger than in the country, while the per centage for the whole county, rises to the high figure, 41.43.

These children's graves—so many of them! Do the stern necessities of humanity demand them for holy anticipative sacrifice? or, are not these early deaths too often begotten of hygienical and professional deficiencies? Who will hear this yearly appeal from half of Humanity?

It may not be uninteresting to the Society to hear stated the ratios of the deaths of males to those of females, during some of the critical decennial periods of life. The period of comparison includes the past five years.

The number of deaths from 20 to 30 years, was of males, 317, females, 422; from 30 to 40, males, 256, females, 253; from 40 to 50, males, 222, females, 178; from 50 to 60, males, 175, females, 196; from 60 to 70, males, 241, females, 204; from 90 to 100, males, 26, females, 31.

It will thus be seen that woman's viability, between twenty and thirty, is much lower than man's. At this period she enters upon maternity, and for maternity with instinctive heroism she jeopards life. The two companions tread the next decenial with nearly equal pace. And then man receives his burdens, the grave responsibilities, the wearisome anxieties, and inexorable ambition. He falters. While woman rests from maternity, and gathers strength for the future struggle, her viability rises. At sixty the costly struggle is over. The burden of sex is thrown off. Her life henceforth is passionless but not joyless, and health and strength beam mildly out, from a nature purified and serene. But man at sixty, too often bereft, disappointed and worn, hastens his steps. And when the weary goal of ninety years is reached, weak woman bears her weaker companion to the grave, and still lives to plant the myrtle there.

For two years past, comparisons have been instituted between the per centages of deaths from consumption, occurring in the Connecticut river towns, and those occurring from this disease in the towns remote from the river. The larger per centage was found to alternate for the two years. This result, very desirable to be ascertained, was to be expected. For in respect to moisture, the whole territory of the county, whether adjoining the river, or remote from it, is similarly exposed. We drop this comparison, and propose to institute one between the deaths from consumption in the city, and the deaths from this disease in the country.

We believe such comparison will be just. For in all appreciable respects, climatewise and soilwise, Hartford and the country towns are similarly affected.

The comparison will be based upon the per centages of consumption to all deaths from known cause, for the past five years.

The per centages run thus:

The per centage for 1855 was, for the city, 17; for the country, 20.8; 1856, city, 19, country, 20.1; 1857, city, 9.8, country, 18.46; 1858, city, 12.46, country, 19.9; 1859, city, 10.27, country, 18.08; average per centage for the five years, city, 13.77, country, 19.47.

It appears from these data, that the whole number of deaths from consumption during the past five years, is nearly six per cent. larger in the country than in the city. If it shall be objected that this large difference in favor of the city may be accounted for in the fact, that the proportionate number of deaths of children is so much greater in the city than in the country, we will accept the supposition and apply the test.

The percentages of deaths from consumption to all deaths from known causes, occurring in persons over ten years old, during the past five years, stand thus: city, 27.6, country, 33.13. The difference in favor of the city is scarcely diminished, and still stands at nearly six per cent. The per centages of deaths from consumption, to the entire population, is also in favor of the city. They stand at 3.31 for the country, at 1.82 for the city.

The committee proceeded no farther.

All of which is respectfully submitted.

L. S. WILCOX,

Chairman of Sanitary Committee.

A BIOGRAPHICAL SKETCH

OF

BENJAMIN ROGERS, M. D.

BY THOMAS MINER, M. D., HARTFORD.

THE subject of this biographical notice, Benj. Rogers, M. D., late of this city, was born at Norwich, Conn., April 5th, 1779.

From a short auto-biography, I learn that he attended a district school until he was fourteen years old. Afterwards he was a pupil in the academy at Norwich, until the age of seventeen. He then engaged himself to a surveying expedition at Susquehannah, Pennsylvania, where he served six months. After that service had ended, he taught a school for six months. He then entered a store at Salisbury, Conn., with his uncle, Mr. Waterman, and remained with him as clerk three years. There he married Miss Mary Austin.

He then opened a store in Great Barrington, Mass., and continued in the mercantile business for a period of four years. In 1806 he began the study of medicine with his brother-in-law, Dr. Evarts. In 1809, 10, he says he spent a year with Hugo Burghart, M. D., in reading and in practice. From what I can learn of Dr. Burghart, he was a man of uncommon intellectual powers, and held the highest rank as physician and surgeon in Berkshire County.

In 1810, 11, Dr. Rogers attended medical lectures in Philadelphia, and in March, 1811, commenced the practice of medicine in Great Barrington, Mass.

The Springfield Republican, in noticing the death of Dr. Rogers, says, "he was engaged in the active duties of his profession for upwards of fifty-three years. In 1816 he was elected a fellow of the Massachusetts Medical Society. In 1839 he removed to Hartford, Conn., and in 1843 received the honorary degree of M. D., at New Haven. He continued in the practice of his profession at Hartford until four weeks before his death, a period of more than twenty years, where the community and especially his junior brethren enjoyed and appreciated the benefit of his sound and judicious counsel." "The

disease," says the Springfield Republican, "to which he succumbed, was Hydro Pericardium, or dropsy of the chest." Last spring he attained his eightieth year, and was still erect, florid, hale and vigorous, when he perceived the premonitory symptoms of this disorder. Thenceforward he was unable to assume the recumbent posture, but he persevered in the labors of his vocation and continued to soothe many a pillow, though his own head during the same time could not lie on one. A month before his decease he was compelled to resign himself to inactivity, but he preserved his quiet and manly fortitude and altogether surprising cheerfulness to the last.

The writer can not elaborately delineate the character and excellent qualities of the friend and medical brother whose memory we revere and cherish with many fond recollections. I possess neither the early acquaintance or the requisite capabilities to do ample justice to the subject, even to compose a brief sketch of his history.

Dr. Rogers was frail in early life, and until he commenced riding. By a careful attention to regimen and diet he recovered his health and became robust, except occasional attacks of erysipelas. At the time of my first acquaintance with him he was the popular medical practitioner, pleasantly located in the then thriving and inimitably beautiful valley of the Housatonic, at Great Barrington, with a practice extending far and wide over that interesting section of Southern Berkshire. He was soon afterwards elected a member of the legislature of Massachusetts, a post of honor which he filled with entire satisfaction to his constituents. Dr. Rogers possessed probably the best and most extensive library of any private practitioner in Berkshire County.

It was accorded to him by the classmates at the lectures at Philadelphia, under the able professors of that institution, that he made great proficiency, and returned to Great Barrington with a mind richly stored with the technicalities and principles of the healing art. Dr. Rogers had subjected himself to the vicissitudes of a changing climate, always active, and by an extreme regularity had acquired a hardihood of constitution that enabled him to practice his profession for half a century. He closed his career of an active and useful life in the family of his son-in-law, Mr. Winchester, at Armory Hill, Springfield, Mass., Oct. 17th, 1859, aged over eighty years.

[Though he did not enter the profession early, yet he prosecuted it vigorously, and was probably as celebrated in those days as any physician in that region. He often quoted Dr. Burghart, his preceptor, as an uncommon man, and his views of disease must have been judicious

and discriminating. He bought many of the new works as they appeared, from time to time, and thus kept himself posted as to new theories and modes of practice, and was willing to give the new remedies a careful trial; in his latter days this disposition was wonderfully continued, and though it can not be said that he gave up the old for the sake of the new, yet he adopted these latter to an extent hardly to be expected in one whom habits and thoughts are supposed to be established by age.

From his conversation I learn that he was prompt and vigorous in the treatment of disease in Berkshire, resorting to the lancet often and freely—always by the way using a spring lancet—and though his views changed in a measure after his residence here, yet he contended that on the hills of Massachusetts it was then necessary to use antiphlogistic agents freely. In his practice here he was judicious, investigating carefully the cause of the disease, particular "in getting the secretions right," but usually not medicating strongly in acute cases, which are so likely to get well of themselves if not too much disturbed. He was much consulted in chronic cases, and to them gave especial attention.

He lived in Berkshire in those good old times when social enjoyment was especially delighted in; and amongst the rich farmers, professional men and gentlemen of leisure, he found many an agreeable companion. Fond of society, with a rich fund of anecdotes and stories, with a genial humor which led him to enjoy the present, and not be too careful for the future; quick in his perceptions, liberal in pecuniary matters, and despising money for the sake of hoarding it, contending that he did good service to his fellows who distributed it, he lived in as much enjoyment as falls to the lot of most men, and was personally esteemed as a friend and a physician throughout the community.

How many of the old stories of Berkshire have I heard again and again, all entertaining, some of them ludicrous in the extreme; and related with a spirit which was sure to give them a point.

The personal appearance of Dr. Rogers was very prepossessing; his figure portly, and remarkably erect, his countenance florid, indicating the most robust health, uncommonly active and vigorous up to a short time before his death; particularly neat in his dress, and polite in his manners, he gave at first acquaintance, a very favorable impression, as a "good old gentleman, all of the olden time."

G. W. R.]

BIOGRAPHICAL SKETCH

OF

JOSEPH F. JEWETT, M. D.

BY J. D. WILCOX, M. D. OF WEST GRANBY.

JOSEPH F. JEWETT was born in Granby, Ct., on the 22d day of August, 1788.

He received his academical education in his native town; where, during his youthful years, was a flourishing school, under the care of Benjamin Ely, Esq., a graduate of Yale College, and a teacher of distinguished merit.

His medical studies were pursued with his father, Dr. Joseph Jewett, a prominent practitioner of the day. He was licensed by a committee of the Hartford County Society of medicine, in 1812. During his course of medical studies he taught school several terms to the entire satisfaction of his employers; and after receiving his license to practice, removed to the state of Delaware, where he renewed teaching, while waiting an introduction to practice; thus showing a laudable enterprise for a living, as well as a commendable desire to make himself useful.

After remaining in Delaware nearly two years, and gaining the respect and confidence of a large circle of acquaintance, he received the unwelcome tidings of the death of his father, who had left a large practice; thus inviting the son to a wide field of duty in his own native town.

This field he soon repaired to, and after uniting his destiny in marriage with Miss Betsey E. Reed, became permanently located in Granby, (Salmon Brook Society,) where he remained in practice until his decease, January 5th, 1860.

Dr. Jewett was a man of very respectable medical attainments, of remarkable memory, and so familiar with medical terms and phrases

as to obtain from his medical brethren the sobriquet of "Medical Dictionary." He was extremely fond of miscellaneous reading, and kept constantly posted on the ordinary as well as extraordinary news of the day. His domestic relations were of the most amiable character, remarkable for gentleness and equanimity of temper, displayed not only in his own family but in all his intercourse with society at large. He valued highly the advantages of an education, and strove to give his children all such as were in his power; and often seemed to lament that his means for that purpose fell short of his fond and most ardent desires.

In practice he was more particularly distinguished for the investigation of chronic diseases, and as an obstetrician. In 1841 he was recommended by the President and Fellows of the Connecticut Medical Society for the honorary degree of doctor of medicine.

Soon after arriving at the age of twenty-one years he united with the order of Freemasons. He was early elected to the highest office in the Royal-Arch-Chapter, in Granby, which office he continued to fill with honor to himself and to the entire satisfaction of his brethren, through the remaining period of his life, a term of thirty-five years. His brethren attended his funeral with imposing ceremonies, and the universally falling tears testified to the estimated worth of their late companion.

In 1828 Dr. Jewett met with an accident by being thrown from his carriage, producing a compound fracture of his leg, and rendering him a cripple for life.

In the summer of 1859 his health began materially to decline; in the fall, there were indications of congestion of the lungs, which symptoms continued to increase until the fatal hour which called him hence. He was apparently conscious of his approaching dissolution, and seemed to anticipate the event with perfect resignation and Christian fortitude.

A BIOGRAPHICAL SKETCH

OF

HORATIO DOW, M. D., OF ELLINGTON.

BY J. B. LEWIS, M. D., OF ROCKVILLE.

Read before the Tolland County Medical Society, April 19th, 1860.

"Each man makes his own stature, builds himself."—*Young.*

HORATIO DOW was born in Ashford, Conn., on the 30th of January, A. D. 1793. His father, Thomas Dow, was a resident of Ashford, and as a citizen, was highly esteemed by his townsmen. Horatio was the eldest of seven children, of whom but three are now living.

When about twenty-one years of age he commenced the study of medicine, under the care of Dr. Joseph Palmer, Jr., of Ashford—a physician of distinguished reputation, and with whom he remained until 1817, when he went to New Haven for the purpose of attending medical lectures. While in New Haven he was a student of Dr. Gilbert of that city, and for both his distinguished preceptors he always cherished the most grateful recollections. Having previously passed a satisfactory examination, he received, on the 28th of March, 1818, a "License to Practice Medicine and Surgery," from the Connecticut Medical Society, and soon after returned to his native town.

Several months passed, after his return home, with but little encouragement to the ambitious hopes of the young physician; when, unexpectedly, it was announced that Dr. Fuller of Vernon had died, and that that town was left without a medical practitioner. On the receipt of this intelligence, Dr. Dow at once determined to try his fortune and skill by the practice of his profession in Vernon. This was in the autumn of 1818, and the "new Doctor" arrived at Vernon Center on the afternoon of the same day that Dr. Fuller was buried. Inwardly congratulating himself upon his final good fortune, there arose before his mind golden visions of a bright and promising future; and the Doctor was ready to exclaim,

> "There *is* a tide in the affairs of men,
> Which taken at the flood leads on to fortune;"

when, to his surprise and disappointment, he was told that Dr. Abijah Ladd of Tolland was also about to display his "shingle" in Vernon and that he had already arrived for that purpose.

For about two weeks both of the young physicians maintained their ground, each doing what little business he was called upon to do. At the end of that time, it being clearly evident that the "supply" (of doctors) "was greater than the demand," a compromise of matters was made—Dr. Ladd agreeing to retire from the field, and Dr. Dow agreeing, on his part, to pay Dr. Ladd fifty dollars for his exit. A promissory note for that sum was accordingly signed by Dr. Dow, and Dr. Ladd immediately removed to Tolland.

The possession of a prize never affords the anticipated pleasure, and when Dr. Dow felt that all competition was clearly removed, the place wore not half the charm that it did during the strife. It occurred to him that his position was, at best, but dearly purchased; and so, in a fit of the blues, he thought he would go back to Ashford. Without a moment's reflection, he sprung upon his horse, and was soon retracing the steps that had brought him to Vernon. He rode at a brisk pace until he had gone a short distance beyond Tolland street, when his horse began to flag, and the Doctor began to reflect, "What," he suddenly asked himself, "am I doing?" and stopping his horse, he dismounted near a large rock by the road-side, upon which he sat himself down for due deliberation. In after years, the Doctor often spoke of this event in his life, and used to say that "so great was the agitation of mind, I trembled like a leaf, and the perspiration started from every pore." Finally, having decided to his own satisfaction that it was his duty and interest to go back and resume his practice, he at once cheerfully remounted his horse, and quietly made a second *entree* in Vernon. From that day Dr. Dow's practice became an established fact, and his success was all that a young man similarly located could desire.

In the autumn of 1821, after having been three years engaged in a constantly increasing and lucrative practice, he was united in marriage to Miss Mary Skinner, of Vernon, an estimable lady who still survives him. After residing in Vernon about fourteen years, he then sold his property and practice to Dr. Alvan Talcott, and removed to Ellington. He lived in Ellington, where he had an extensive practice, until 1846, when he removed to East New York on Long Island, where he remained but eighteen months. His next place of residence was New York City, but he remained only one year in the

city, and then came back to his old home in Ellington, where he continued to reside during the remainder of his days.

In the practice of his profession, Dr. Dow was certainly successful, and always obtained the confidence of his patients. To those of us who best knew him, this fact is not strange; but a brief acquaintance with Dr. Dow, would lead one to believe it quite impossible, that so impulsive a man could engraft himself into the good will and sympathies of the sick. One of his townsmen* who knew him well, says, "the community in which he moved will remember the frank and vehement manner in which he would, at times, express himself, yet no one would cast a reflection on the purity or kindness of his heart. He gained admiration by what in most men would have caused repulsion. He was called to see a lady who was attacked with pneumonia. He had never seen the lady, but he knew that she had lived in the Eastern World for many years. When he entered the room where she was bolstered, and he found her laboring for breath and in severe pain, his first salutation was, "folks live by breathing in this part of the world; I do not know how they do where you have been." This lady afterward said, that when the Doctor thus saluted her, she "did *wonder* why her friends had sent for that man." As long as she continued in this region, however, she always wanted Dr. Dow if she was sick. He had her full confidence as a physician. With his abrubtness of speech and quaintness of language, he often hid fountains of feeling pent up within him. If, at any time, a patient was wounded by one of the Doctor's expressions, if he ever learned of it, he was much the keenest sufferer."

"Such a man as Dr. Dow would be expected to be frank. As the weakness of man when sick is usually doubly weak, such a trait of character is not considered a physician's readiest passport to the confidence of an ailing community. Who knows so well when he is sick, as the complainer? He is not the one to be told "nothing ails you." Dr. Dow's frankness did not allow him to trifle with whimsicalities to favor his *ride;* yet his good common sense aided him to inspire those whose disease lay somewhere between the garments and the body, with the assurance that they would live to see another day.

It was by his well known frankness and veracity that Dr. Dow won the confidence of his patients. This is best told in the language of another of the Doctor's townsmen,† who says, "if I were to point out his distinguishing and predominating characteristic, it would be

* E. Hall, Esq. † Hon. J. H. Brockway.

truthfulness; or if I may coin a word, his *outspokenness*—his freedom from guile and duplicity. This trait of character shone out in all his dealings, and especially in his treatment of the sick, and at the bedside of his patients. If his patient was very sick he told him the truth, and if not very sick he told him so, and probably offended many more by the latter than by the former course. He did not like to be teazed about the doses he administered. I once said to him, when sick, 'Doctor, what is that you are giving me?' He replied, 'take it, and if it does you no good I will tell.' I took it and was better, and asked no more questions."

No people better knew and appreciated Dr. Dow than did his immediate townsmen, and to them is the writer of this sketch indebted for many interesting incidents illustrative of the Doctor's peculiar characteristic traits. It would be a pleasure to record them, but it would extend this paper beyond a desirable limit. Fortunately it is not necessary, as I am happily able to give in their stead, an ably written paragraph on this point, by the gentleman* whom I first quoted. This gentleman writes, "a prominent characteristic of Dr. Dow was, his general inquisitiveness. He was far from inquiring into those things with which one should not intermeddle. Whatever he saw in the agricultural, mechanical or professional relations of life was at once saluted by him with a question—what is this? how is this? to what is it to be applied? He as readily endeavored to make, whatever he saw, subservient to his purposes. He was not one of those who are afraid of innovations. He did not despise old things because they were old. He even cherished old associations with fondness. He believed in progress; and in his profession, or in the management of any of his interests, he introduced all improvements that his means would allow.

"He was fond of agriculture, and he evinced his taste and skill in the cultivation of his farm. He had the true idea of success in this, that a 'little land should be well tilled.' His efforts to improve wet and marshy lands, are prominent among those made in Ellington. He demonstrated practically the utility and feasibility of this kind of labor, as his farm now shows.

"As a public man, he was decided in his own views, and in the expression of them on all matters of public interest. He had a will to act boldly for the right, and he only needed flow of language to battle for the right, and that right valiantly. He was not a man of fluent speech, and of consequence, not what we call a great talker.

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* Mr. Hall.

But he was a capital listener, and he would listen with great eagerness and delight to hear men of sense talk. When he did speak, however, he followed the good old rule—never to speak 'till he had something to say.

"In one respect Dr. Dow was a remarkable man. He showed a peculiar power in overcoming evil habits. What man, at the meridian of life, is expected to change bad habits for good ones? It is rare to find one who has followed the lower instincts of life until the force of life has culminated, who then turns and becomes a model man. When such an one is found, he is an anomaly, and almost a prodigy. All who have been acquainted with Dr. Dow, have been highly gratified and deeply interested to see him, since the autumn of 1836, relinquish one habit after another, until he felt such freedom from alloyed appetites, physical and moral, that he could say, 'I feel no temptation from early evil associations.' He is an example in this respect to all. His mission in life was not a vain one, if he had shown no other attainments, except this one of self-government. He stands for the encouragement of man, showing that by persistent, well-directed efforts, evil may be vanquished, and good be made to rule.

"As a religious man, Dr. Dow's life is not without interest. He was severely schooled in family afflictions. These led him to think of his relations to another life. He had many old prejudices and associations to change. For several years past he has been noticed to be interested in practical religion, and to enjoy discourses which appeal closely to the inner life. A year and a half since, he made a public profession of religion. His own remarks made at this time indicates the man. He said in reference to this act, 'I have been a long time shielding myself under the faults of professed Christians; I find that it is time for me to take care of myself and let others' faults alone.'"

For the last two or three years it has been quite apparent to the friends of Dr. Dow, that his physical powers were waning. There were occasional and suspicious symptoms of slight local paralysis, and these increased in frequency and degree, until it became but too evident that they were the forerunners of apoplexy. Every effort was made to ward off or delay the threatened attack. Perhaps, by medicine, regimen, and watchfulness on the part of the patient, the lease of life was somewhat lengthened; but the stroke finally and suddenly descended, and on the 28th of September, 1859, our friend was numbered with the dead.

A BIOGRAPHICAL SKETCH

OF THE LATE

DR. JAMES MORGAN,

OF NEW LONDON.

BY L. S. PADDOCK, M. D., OF NORWICH.

JAMES MORGAN was born in England, March 20th, 1802. During his childhood his parents removed to this country and settled in New London. Having a natural fondness for the sea, which fondness was greatly increased by his residence in a seaport town, his early life was spent on the water; but this kind of life, although pleasing to his taste, did not meet the approval of his parents, and by their persuasion he was induced to abandon the sea and commence a course of study. With this change of plan, he entered his name as a student of medicine in the office of the late Dr. Mercer, of New London, and with him completed his preliminary course. Nothing seems to have been omitted in preparing himself to become a useful member of his profession. He attended lectures in the cities of London, Boston and Philadelphia; from one of the medical schools in Philadelphia he graduated in 1828. Having taken his degree, he returned to his old home, New London, and commenced practice. In 1831 he married Miss Charlotte Mercer, the daughter of his former preceptor. New London, from that time, continued to be his home, and here he engaged in the arduous duties of his profession. Dr. Morgan was for many years a member of the Connecticut Medical Society, and his membership continued till his death.

Of Dr. Morgan's attainments as physician and surgeon, his well established reputation is a sufficient guarantee. In the department of surgery, his reputation was by no means limited; surgery was his preference, and to this he had given special attention. In the treatment of diseases of the eye he was regarded as unusually skillful

and successful. As a general practitioner he was careful and attentive, always prudent, and never carried away by fancies or beautiful theories. Whatever good common sense and a practical mind suggested as the proper course of action, that he adopted.

Dr. Morgan was always the friend of the poor; his charities were liberal in proportion to his means, and his gratuitous professional practice was large. No man was in so humble circumstances as to be refused the Doctor's services, and the expectation of pecuniary compensation was not a motive in his friendly attentions and intercourse with the sick. As a man he was warm-hearted and sincere, generous and upright in all his dealings, his circle of friends was not confined to those whom he had professionally served, but he made friends of all.

The disease by which his life was terminated was Lumbar Abscess, from which he suffered three months; he breathed his last on the third of July, 1859. During his illness, although he suffered much, he was sustained by the hope and consolations of a Christian. His faithful pastor, who visited him often during his sickness, says, "he conversed freely on religious subjects, and delighted much in devotional exercises. Some time before his death he received the Lord's Supper with much apparent satisfaction, and at last fell asleep in the enjoyment of that peace which passeth all understanding."

BIOGRAPHICAL SKETCH

OF THE LATE

AMBROSE IVES, M. D.

BY P. G. ROCKWELL, M. D., OF WATERBURY.

Dr. Ambrose Ives, late of Waterbury, Conn., was born in the town of Wallingford, New Haven Co. He was the son of Abijah Ives, a respectable farmer in the above named place. Of his childhood and early youth we lack information. He was favored with fair advantages for a good English and sufficient classical education. He pursued the higher branches at the celebrated academy located in Cheshire, Conn. After finishing his preliminary course he commenced the study of medicine under the tuition of the late Dr. Cornwall, of the same town. From a classmate of Dr. Ives we have learned, that he was a laborious student, thorough in all of the branches of professional reading in which he engaged. He was, as in after life, extremely frugal of his time, and being favored with a retentive memory, he made excellent progress in his studies. In the year 1808, after completing his medical pupilage, he was licensed to practice medicine and surgery, and then located in the town of Wolcott, where he diligently applied himself to his professional duties during a period of nineteen years. He was a man of medium height, strong and robust, in manner and conversation pleasing. He soon obtained an extensive practice, both within and out of town, which was mostly the result of thoroughness and precision, the leading characteristics of his mind, made manifest in all his avocations. Hence the communities in which he practiced were not slow in appreciating his excellent qualities. He was much sought for by his medical brethren in consultation, in the adjacent towns. His pleasing address, intelligent conversation, which was interspersed with cheerfulness and humor, and always evincing good common sense, rendered him companionable and popular. Dr. Ives manifested the same care and precision in the selection of his reading matter which characterized his practical duties, reading, in comparison with some, but few

books, whilst these were selected by him with great care, and when read, were dissected as by a master's hand. An old associate and intimate friend remarks, that he ever made the most that could be made of his reading. He evinced the same discrimination and good common sense in the business affairs of life, as in the capacity of prescriber for the sick. He was prompt in attending to professional calls, and was also prompt in requiring remuneration for the services he rendered, duly considering the pecuniary ability of his individual patrons. He aimed to be faithful in the discharge of his duties as physician, and to demand of those whom he served, a corresponding manifestation of their obligations in return. Thus he educated the communities in which he practiced, to feel that the medical man, like other men, was worthy of his hire.

As the result of this course, when a young man he laid the foundation of competency, instead of penury and want. We believe this qualification to be a valuable one for every physician to cultivate, but one that the majority of our profession do not possess. Dr. Ives' strong mind enabled him to prosecute various kinds of business with success. He was an efficient town officer, serving his townsmen in different capacities. Several times he represented the inhabitants of Wolcott in the Legislature of the State. In the year 1818 he was a member of the convention for the formation of the constitution of this State. No community or individual had cause to regret the entrusting of important interests to his care. He had much fondness for offices of trust, and was eminently faithful and methodical in the transaction of business, but he took the greatest pleasure in the practice of his profession. This he followed with marked energy, until his pecuniary interests became so large that they required his whole time. He removed from Wolcott to Wallingford in the year 1827, for the purpose of settling his deceased father's estate; here he remained for two years, at the expiration of which time, he removed to Plymouth, Litchfield County, where he resumed the practice of medicine. In the last named place he soon acquired a large practice, in which he continued until the year 1834 ; at this time he relinquished his practice entirely and removed to Waterbury, there engaging in manufacturing business. The same full success attended him in his efforts in this new sphere of duty. Through the blessing of Providence and his fortunately combined traits of character, he accumulated a handsome fortune. In the last year of his life he was afflicted with paralysis, which produced his death. He died in the year 1852, at the age of 66. He was married in the year 1817, to Miss Wealthy U. Upson, who still survives him.

BIOGRAPHICAL SKETCH

OF THE LATE

STURGES BULKLEY, M. D.,

BY P. G. ROCKWELL, M. D., OF WATERBURY.

STURGES BULKLEY was born in the town of Weston, Fairfield county, Conn., October 12th, 1799. His early years were spent upon a farm. When a boy his parents removed to Ridgefield, where he pursued his classical studies, under the care of the Rev. Samuel M. Phelps, a gentleman of fine qualities of mind, and superior attainments. Early in life his mind was turned towards the medical profession, and after having completed his preparatory studies, he entered the office of Dr. Nehemiah Perry, of the same place. He attended lectures in the Medical Department of Yale College, at which time Dr. Nathan Smith occupied the chair of Surgery. Having completed his course of medical study, he procured a license, as was more customary in those days, to practice medicine and surgery, in the year 1821. He established himself in the town of Monroe, Conn., where he remained in the practice of his profession till his removal to Waterbury in the year 1850. In the year 1839, the Faculty of Yale College conferred upon him the honorary degree of M. D. Professor Nathan Smith was his particular friend and instructor, and it may be in part owing to this fact, that of the branches of the profession, he preferred the practice of surgery. He was a skillful and prudent operator, a careful and discriminating prescriber, ever improving the lessons of experience. The characteristics of his mind were prudence, foresight, and conservatism, whilst faithfulness to his convictions of right preserved his integrity. In early life he became a member of the Baptist communion, but was afterwards an attendant upon Episcopal services.

In politics, Dr. Bulkley was always connected with the Democratic party, and was firmly attached to their principles. In the various

public offices conferred upon him by his townsmen, he proved himself trustworthy. He was frank in speech, plain in his habits, quiet in his tastes, liberal and hospitable: he walked willingly in the old ways. He was much attached to his profession, and enjoyed the confidence of his medical brethren. He practiced medicine from the year 1850, in the town of Waterbury, Conn., until his last sickness. He died July 9th, 1857, of malignant erysipelas, after a brief illness, with the natural force of a vigorous manhood apparently unabated.

APPENDIX A.

Report of the Annual Examination of Candidates for the Degree of Doctor in Medicine at Yale College for 1860.

THE Committee of Examination convened on Wednesday, January 11th, 1860, continued in session two days; present on the part of the Connecticut Medical Society, Ashbel Woodward, M. D., of Franklin, President, James Welch, M. D., of West Winsted, and Timothy Dimock, M. D., of Coventry; and on the part of Yale College, Profs. J. Knight, C. Hooker, W. Hooker, P. A. Jewett and C. A. Lindsley. After the organization of the Board, thirteen candidates read Dissertations, viz.:

1st. Lewis Henry Alling, New Haven, on Hernia.

2d. David Carlile Anay, Dimock, Pa., on Specialties in Medicine.

3d. John William Barker, Clinton, on Scarlatina.

4th. Abel Carter Benedict, Cornwall, on Dropsy.

5th. Timothy Huggins Bishop, New Haven, on Cataract.

6th. Evelyn Lyman Bissell, New Haven, on Aneurism.

7th. Platte Edward Brush, Dimock, Pa., on Medical Heroism.

8th. Samuel Farnam Chapin, Wattsbury, Pa., on Thetis Medicatrix Natura.

9th. Nelson Gregory Hall, Guilford, on The Mind Physiologically and Psychologically considered, with the Valedictory Address.

10th. Charles Henry Hubbard, Clinton, on Mental Influence in Disease.

11th. John Benjamin Welch, West Winsted, on Pneumonia.

12th. John Burns Williams, Danbury, on Injuries of the Head.

13th. Edward Prindle Woodward, Bethany, on Phthisis.

The above named candidates, after sustaining a most creditable and satisfactory examination, were unanimously recommended for the degree of Doctor in Medicine.

P. G. Rockwell, M. D., of Waterbury, and A. T. Douglass, of New London, were appointed to give the annual addresses to the candidates in 1861 and 1862. Dr. James Welch was appointed to report the proceedings of the Board to the President and Fellows of the Connecticut Medical Society.

The Commencement was held in the new Medical College, on Thursday evening. The exercises commenced with prayer by President Woolsey, after which a large audience of ladies and gentlemen listened with much interest to the Valedictory Address, given by Nelson G. Hall, of the graduating class. The address was highly creditable to the author. The address to the candidates by Samuel W. Gold, M. D., of West Cornwall, was particularly appropriate, and well calculated to do good, after which the degrees were conferred by President Woolsey, of Yale College.

And your committee would further report: That the facilities for the pursuit of Medical knowledge, so long afforded by the Medical Department of Yale College, and which has given to it a reputation highly enviable, presents at the present time, new and additional inducements to the medical student.

The Board adjourned to meet for a semi-annual examination on

———.

Respectfully submitted on behalf of the Board of Examination.

JAMES WELCH, M. D., *Secretary.*

APPENDIX B.

To the Fellows of the Connecticut Medical Society, in Convention, Hartford, May 23d, 1860:

The Committee of this Society appointed to nominate, on its part, Professor in the Medical Institution of Yale College, respectfully report:

That at a meeting of the Joint Committee of the Corporation of Yale College and the Connecticut Medical Society, called by written notices from Theodore D. Woolsey, LL.D., President of Yale College, and held, agreeably to call, at New Haven, Sept. 15, 1859:

There were present on the part of the Corporation of Yale College, Theodore D. Woolsey, D. D., LL.D., President, Jeremiah Day, D. D., LL.D., Benjamin Silliman, Sen., M. D., LL.D., David Smith D. D.

On the part of the Connecticut Medical Society, Drs. Rufus Blakeman, B. H. Catlin, William Woodruff, John B. Lewis, Albert Morrison. Dr. B. H. Catlin was appointed Secretary.

The President read a communication from Henry Bronson, M. D., Professor of Materia Medica and Therapeutics in the Medical Institution of Yale College, resigning his Professorship.

After consultation the Committee proceeded to ballot, and Charles A. Lindsley, M. D., of New Haven, was unanimously nominated to fill the vacancy occasioned by the resignation of Prof. Bronson.

B. H. CATLIN, *Secretary.*

NEW HAVEN, Sept. 15th, 1859.

APPENDIX C.

The Committee on Publication would recommend the following papers, viz.:

A Sanitary Report from Hartford County; by L. S. Wilcox, M. D.
The following Biographical Sketches:
Horatio Dow, M. D., of Ellington; by J. B. Lewis, M. D.
Dr. James Morgan, of New London; by L. S. Paddock, M. D.
Joseph F. Jewett, M. D., of Granby; by J. D. Wilcox, M. D.
Benjamin Rogers, M. D., of Hartford; by Thomas Miner, M. D.
Sturges Bulkley, M. D., of Waterbury.
Ambrose Ives, M. D., of Waterbury; by P. G. Rockwell, M. D.

In regard to that portion of the President's Address, referred to the Committee, "relating to the advantages to be derived by the Society from the establishment of a periodical magazine," the Committee would request a recommittal, to be reported upon at the next Convention.

Respectfully,

P. M. HASTINGS,
ROBERT HUBBARD,
P. G. ROCKWELL,
G. B. HAWLEY,
J. B. LEWIS,
} *Committee of Publication.*

ARTICLE III.

ANNUAL ADDRESS.

BY ASHBEL WOODWARD, M. D., OF FRANKLIN,

President of the Society.

Read at the Annual Convention, May 22d, 1861.

LIFE.

THE mystery of life is a profoundly interesting theme for contemplation. Even in the lower grades of organic bodies—in plants and inferior animals—the student of nature finds abundant material to occupy his attention, and much to baffle his curiosity. On passing to the study of the *vital principle* as it appears in man, the subject becomes more complex, more subtle, and consequently more extensive in its demands upon our thoughts and imagination. In man the vital principle is the mysterious bond confining an immortal spirit within its temporary and fragile tenement. In him an organism endowed with appetites shared in common with other animals, is united to a higher, a spiritual life, which opens to him a new world as well in the present as in the future. While the union between body and spirit remains unbroken, their reciprocal influence on each other has much to do in determining the issue not merely of morality, but of health and longevity also.

As man was the last object of the visible creation, he is likewise the most perfect. Made in the image of God he is launched into existence laden with responsibilities and freighted with precious hopes. Rising infinitely above other animals in the endowments of reason and intellect, he far surpasses them in delicacy and nice adjustment of corporeal structure. In the creatures designed for the use of man and placed under his dominion, *utility* forms the predominant idea in the plan of physical contrivance. Whether made for food, or labor, or simply to sport awhile as idlers, they manifest

the possession of no lofty or etherial qualities. The outermost circumference of their being embraces only agility, strength, endurance and docility, attributes essential to present usefulness, but pointing to no ulterior destiny.

On the other hand, in the case of the human species, from the moment the process of development commences in the germinal speck, through all the stages of subsequent growth, the corporeal frame and functions have obviously been contrived in order to make a temporary home for the soul. The immaterial part of our nature must act through the material. Bone and muscle are the obvious instruments through which an invisible spirit impresses force upon objects of sense. The presence of the spirit depends on the uninterrupted supply of food, drink and breath. The brain and nervous filaments form the medium of communication between the soul and bodily substance. In the brain resides the intellect. Along the white cords extending from this glorious temple of thought, the will transmits imperial mandates. As soon as the first trace of nervous pulp appears in the embryo, we see a subordination of all other parts of the mechanism to it. Around this as a center, and to supply its wants, are formed the heart, the stomach, and the lungs. From the earliest, crude, intra-uterine germ, the progress of physiological development is subservient to psychical development. As new conditions arise in the gradual evolution and expansion of the primitive germ, they are met by corresponding changes in organic forms and functions. Respiration is successively carried on by a membrane, by gills, and by lungs; the circulation is sustained first without a heart, then with a heart of one cavity, and at length with a heart of four; nutrition is afforded by a wide diversity of means till the stomach supplants them all at birth. Not only has one kind of organ succeeded another, but their very substance has changed many times by interstitial death and removal. The only identity of the body is one of form and not of material. Yet the same principle which animated the germ, also animated the embryo, and forms the life of the man. It is this that continues identical in the distant points of germinal inception and senility. It is this that will not perish with the body but live on forever.

Life, physiologically speaking, is maintained by an incessant struggle with death. Opposing forces are arrayed against each

other, the battle never pausing to allow the combatants a moment's repose, till the destroyer gains his final triumph. On the one hand the vital power acting through the various organs of the body, transforms food and drink into homogeneous, living substance. While the creative force is busy in converting aliment into blood, bone and tissue, the chemical or decomposing force is equally active in demolishing the curiously wrought fabric. Effete molecules are continually liberated, from the mass of which they recently formed a living portion. Every organism is a mere figure or outline, which an unnumbered host of particles, ceaselessly arriving and departing, fill up. Foreign substances are introduced into the system through the digestive apparatus, and after a brief transformation into vivified atoms, loose their vitality and are cast aside. They come and go like the waters of a river. The constituents of the stream undergo perpetual change, yet the river remains the same.

If asked to define what the vital principle is, we should find the undertaking difficult. Scientific researches have unveiled many mysteries, yet many still remain beyond the ken of science. To view it, as some have done, as one of the natural powers belonging to the same group with heat, electricity and magnetism, is equally abhorrent to the sensibilities of the Christian and the dictates of reason. Were such a conception true, we should be compelled to renounce the crowning glory of humanity by the resignation of our faith in immortality. It is easy to invent general terms and refer phenomena to them. On endeavoring to apply them to exact use, however, we often find that they have led us astray into vague speculations.

So long as the vital principle animates the body, many of the laws to which matter is obedient are counteracted or held in abeyance. Notwithstanding the immense waste of substance incident to the chemical reactions going on within the system, the human mechanism may continue to perform its work for many years. But let the vital knot be cut even in the midst of the highest health; the form recently aglow with intelligence and activity, is now yielded wholly to the dominion of material forces. Myriads of animalcules burst from the stagnant juices to devour the substance which those juices a few hours before were busy in nourishing. Decomposition hurries on, and shortly the proudest offspring of creative power becomes a loathsome mass of ruin.

What we call life, then, is indicated by the presence in the body of the active spiritual part of man. Indestructible and immortal, it impresses a temporary vitality upon the particles successively constituting fibre and blood. Its potency may be inferred from the effects it works independently of the will. A full sized man has in his vascular apparatus at least fifty pounds of blood. The heart contracts seventy-five times per minute with sufficient force to propel its contents through the aorta to the minutest capillaries. Assuming that there are five pounds of fluid in the effluent currents, this weight will be lifted forty-five hundred times in a single hour by the involuntary pulsations of the heart. Or if we suppose the muscular exertion thus equably diffused over a period of sixty minutes, to be concentrated in one effort, more than twenty thousand pounds would be lifted by the heart and hurried to all parts of the frame. Yet such immense labor is hourly performed for many years, and with an ease that leaves us entirely unconscious of the outlay of force which keeps this hydraulic engine at work.

When we reflect upon the consumption attending every movement of the body, whether voluntary or involuntary, upon the delicacy of its machinery, and the continuity of its labor, we wonder how it can last so long. Other animals, vastly superior in strength, though breathing the same air, and subsisting on food exactly suited to their wants, sink into decrepitude before man has half attained the maturity of his growth. Generally speaking, a coarse, tough, and imperfect organization indicates the strongest tenacity of life. The gnarled oak braves the storms of many centuries. Inscriptions found on the shell of the tortoise connect its existence with widely distant points of time. Animals of simple structure have exhibited manifestations of life after entombment for immemorial ages. Passing to wild beasts and domestic animals, we find an astonishing diminution of vital tenacity. As their organization is more perfect, their wants more numerous, and their generative function more exalted and therefore more exhaustive, so their powers are more rapidly consumed. Man presents an exception to the general laws. The two extremes of organization—the most complete and the most incomplete—are alike in resisting most successfully the ravages of time.

Passing by, as foreign to our present purpose, the obscure physiological analogies which intimate the possession of certain qual-

ities in common by all long-lived creatures; we think that the superior longevity of man is due in a great measure to his spiritual endowments. Reason, intellect, soul, place him in communion with a world entirely distinct from the world of sense. Two natures are mysteriously united in the body. High mental and moral culture imperceptibly refines and improves the physical texture. Brain-substance and muscular fibre become more delicate and enduring under the influence of judicious intellectual training. Moreover from the domain of thought and fancy, of emotion and affection, are drawn wonderful supplies of nourishment that spiritualize and lengthen life. The immaterial, shadowy, yet potent food of the mind, does not, like corporeal aliment, require a destructive process for its assimilation. Here, unlike the physical forces producing waste and repair, which at best maintain but a doubtful equilibrium, *all* the figures *ought* to be found on the profit page. Mind acting normally, is pre-eminently original and creative. In this view the appropriation even of the accumulations of others is to the student a *quasi* original process attended with the charm and benefit of novelty. Since spirit is immortal, it can not wear out with use. It follows that through his intellectual and moral nature man derives from the invisible world of thought and feeling, constant accessions to the store of vital force.

Mental cultivation, pure social enjoyments, the indulgence of refined tastes, possess an efficacy far transcending the excellencies ascribed to their elixirs by mediæval alchemists. Literature bearing down the stream of time precious treasures of knowledge, perpetuating the cumulative wisdom of the past, and embalming for ever the creations of fancy by enlarging and ennobling the area of human action, adds to the duration of human life. Music, painting, sculpture, in short whatever imparts pleasure through the medium of the higher attributes, accomplishes the same end by softening the asperities and diminishing the friction of our earthly journey. The hopes stretching forward into an eternal hereafter, and making man a prospective sharer in all possibilities of happiness and glory, wonderfully augment his resources for resisting the deadly agencies of time.

Again, the gift of reason, a faculty denied to other animals, enables man to discover the laws of health. We learn from experience that certain articles are wholesome and certain, others injurious

when used for food. But substances indigestible or poisonous if taken in excess, may prove extremely valuable in minuter quantities. Experience gives us facts. Reason interpreting the meaning and significance of facts, deduces from the multiplicity of them a few uniform rules. Unseen causes active in nature, manifest their existence by their effects. Reason taking up apparently isolated and independent effects, explains their origin, connection and purport. Without reason, man would have a poorer chance than the beast for the preservation of life, because he would lack, besides, the guidance of instinct. Yet it is common to speak of man as a child of nature who attains the highest physical perfection in a state of barbarism. Some seem to think that the external surroundings of the savage, almost unmodified as they are, by the interference of reason, are pre-eminently conducive to health and longevity. In their view every change wrought by civilization upon primitive habits is necessarily deleterious to the human constitution. But such a position is wholly untenable. Experience and common sense alike contradict the dogma. An All-wise Father never decreed that the idle barbarian should in any respect excel the enlightened. Is not every *good* the fruit of toil? Not only high attainments but even *comfort* is the result of much antecedent labor and thought. Our existence is a perpetual struggle against obstacles, and without obstacles to overcome life would hardly be worth the name. In tropical regions, the spontaneous growth of the earth supplying the means of subsistence without exertion on the part of the native tribes, they seldom ascend above the foundation-story of civilization. In high latitudes many fierce assailants must be vanquished to secure even the continuance of the race. While nature is still kind, she makes the fruition of her bounties dependent on the intelligence and energy of those who would enjoy them. She furnishes seed and soil, and then sternly commands us to work for harvests.

Nor are her impositions less exacting when the granaries have been filled in autumn, for before the corn is ready for food it must by an important chemical process be transformed into bread. Our clothing, our houses, in short all the comforts about us, are directly or remotely the offspring of an infinitude of toil, study, and ingenuity. The combinations necessary to form the steam-engine or the factory-loom, were as possible three thousand years ago as to-

day. But man was compelled to discover for himself the capacities thus latent in iron, wood, and water. The richest bounties of Providence are not obvious to the senses. The Creator hid countless treasures out of sight, that the pursuit of them might stimulate human intellect to action. As gold and silver and coal are buried in the earth, as pearls rest beneath the billows of the sea, so the most valuable truths and principles are often concealed far below the surface.

Reason, enlightened by study, is as important in the investigation of the laws of health as of physics. The unrestrained promptings of nature are often most dangerous guides. Wisdom purchased at the cost of many bitter experiences, admonishes man to beware of yielding blindly to her impulsion. If we would seek security against the dangers which beset our pathway, we must exercise intelligence, resolution, and judgment at every step. Hygiene as a science, like chemistry or botany, can only be elaborated by patient research.

Appetites are essential to the preservation both of the individual and the species. But their innate strength is an ever-present temptation to hurtful excess. Virtue springs from the proper control of the active animal impulses, and virtue is the twin brother of health. When passions are riotous, and the siren songs of pleasure most seductive, reason at the same time lifts the voice of warning, and fortunate is he who heeds it. Life is environed with perils, but many of the most imminent are in a measure of our own creation, and may be shunned by prudence.

Infants at birth are like boats pushed from the land into a dangerous ocean. Some go down in the act of launching. As the fleet moves from the shore, one after another of the tiny craft disappears beneath the wave. A third have perished ere the weakness of childhood grows into the strength of youth. They are now entering upon the most tempestuous part of the sea. The wind no longer blows in steady currents, but in fitful gusts and furious gales. Yet how large a share of the rash navigators spread every inch of canvas, and bound recklessly over the surging waters. Wrecks are abundant—wrecks shorn of former beauty, goodness, and strength. Some having dashed into these perils with headlong indifference, as if by miracle escape. Many escape, however, with torn sails and shattered sides, rotten and unseaworthy. Another division, having safely passed the shoals and quicksands of youth, brave the

storms of manhood triumphantly. It is needless to remark how generally their good fortune is due to past moderation and prudence.

In old age the benefits of early obedience to hygienic laws, appear most strikingly. Where the system has been abused, the organs successively fail to perform their normal functions. Incurable suffering is engrafted upon a constitution prematurely shattered. Existence becomes a curse, and death, though shrouded in dread uncertainties, is often coveted as the last remaining boon. But a summer's evening is not more serenely peaceful than the old age which concludes a life of virtuous self-restraint. As the sun sinks with even pace adown the western slope, emblazoning its glories upon the clouds, and bidding adieu to day in the midst of golden radiance, so such a one passing the verge of life, enters the confines beyond, so naturally and beautifully, that death seems but the sweet repose of a wearied body.

Of a hundred children, few will pass the moderate limit of three score years and ten. Of a million, only two or three will reach their centenary birth day. Yet on referring to the early annals of the race, we learn that the outermost limit now allowed to the continuance of life, found our ancient ancestors in the fresh bloom of manhood. Century followed century ere they were bowed to the grave by the weight of years.

In this connection two questions naturally suggest themselves:

I. What has caused this degeneracy?

II. Is renovation possible?

1. When the first pair came from the hand of God they embodied the highest ideal of physical perfection. We may well believe that their organism was so complete as to confer what would now seem a miraculous immunity from suffering and decay. The first transgression, however, lifted the floodgates of destruction. Thereupon an empire of peace was invaded by unholy passions and debasing lusts. Moral turpitude and physical degeneracy stalked forth arm in arm. The earliest born of men was a murderer. Soon the corruptions of the race demanded the extinction of all save a single thread in the waters of the flood. Cities were destroyed by fiery showers. Even earth herself gaped open in seams to engulph the impious. As the tide of wickedness rose the span of life grew shorter. Sinful practices both multiplied the

forms of disease and diminished the capacity for resisting their ravages. Now an inexorable law interposed its decree—"The iniquities of the fathers shall be visited on the children,"—a decree fearfully infallible. The dissipations of the father reappeared in the sickly form of the son. He in turn surrendered a more fragile body to the gratification of similar appetites and lusts. Thus the work of deterioration has progressed, till for many centuries past, a large percentage have been born without sufficient viability to survive the period of infancy. Many cursed with the transmitted penalties of sin, are unfortunate enough to outlive the perils of infancy only to suffer till the feeble flame of life is extinguished by the first rough breath it encounters. Armies of maladies, brandishing the sword of death, have thus been sent forth to work destruction.

This truth is further illustrated by the hereditary character of many distempers. Poisons dissolved in the blood, tendencies to certain kinds of death, pursue families for generations. Gout, apoplexy, scrofula, consumption, often descend as an inheritance from parent to child. A novice entering upon the study of medicine, is astonished to find that among the predisposing causes of disease the hereditary taint enjoys such unenviable preeminence. And this is frequently engrafted on a stock by excesses or sins. The burly English fox hunter suffers the pangs of gout with the more equanimity since the twinges of his great toe are a sure token of the luxurious habits of his ancestry. Over-indulgence in wine and rich food imperceptibly introduces into a family the apoplectic diathesis. Let the venereal virus once circulate in the blood and burrow in the bones, and the poison will reappear in the sickly countenance and frail figure of the great-grandchild.

In tracing the lineage of an individual we find that the number of ancestors increase in a geometrical ratio with the receding generations. There flows in his veins the blood of two parents, four grand parents, and so on in the scale of ascent. Assuming that there have been no intermarriages among them, the tenth degree of removal will give more than a thousand ancestors for that degree alone. This consideration shows how inherited predispositions to disease may intermingle and multiply with the lapse of time. We no longer wonder that millions annually perish on the threshold of existence. It ceases to excite surprise that we so sel-

dom meet even with distant approximations to perfect physical development. When the sculptor wishes to cut in marble an Apollo or a Venus, he is compelled to take a face from one, a bust from another, an arm from a third, a hand from a fourth, till minute and isolated excellencies of form have perhaps been culled from the people of an empire to give embodiment to a solitary ideal.

The causes enumerated are sufficient to have reduced materially the average vitality of the patriarchal period. Add to these the prevalent ignorance of hygienic principles and contempt for their observance. We have already spoken of the deleterious effects of intemperance and vice. But aside from immorality, many causes operate noiselessly but surely in undermining health. Some are so prevalent that familiarity with them blinds us to the extent of their baneful influence. One drawing after it momentous consequences, is brought daily to the notice of the physician.

Upon the constitution and sanitary condition of the mother depends in a great measure the stamina of her offspring. Yet by sedentary habits, by the persistent neglect of exercise in the open air and sunlight, elements essential to the well-being of all forms of life, American women are very generally incapacitated for transmitting a vigorous *stamen vitæ* to their children.

Again, the injudicious management of the young, often diminishes to a still lower point the scanty supply of vitality with which they were furnished at birth. Infants are confined in close rooms, buried in blankets, fed on highly seasoned and stimulating food, drugged with cordials, and surfeited with tea, coffee, candy and cake, all of which are absolute poisons to their delicate organs. In consequence of such nursing, life is intensified and their whole being exalted to a state of preternatural sensibility, whereby the predisposition to disease is fearfully increased. We are persuaded that the secondary appetites have sometimes been fully formed during the first year of infancy. The babe cries, whereupon the nurse administers some alcoholic preparation to relieve an imaginary cholic. The "medicine" evidently works like a charm, for the wailing ceases and deep sleep ensues. A recurrence of the cry brings a repetition of the dose. Yet the apparent slumber was not the repose of nature, but the stupor of intoxication. The child thus wickedly outraged is in reality a drunkard. The thirst for spirituous liquors is fully developed. During early boyhood

the appetite may remain latent because the means of excitement are removed. But when temptation is thrown in his way, a solitary sip may revive the slumbering taste. The demon seizes upon the youth with pitiless power, and he takes to the cup with the reckless self abandonment of the confirmed sot.

But it is painful to pursue in detail the causes of the physical deterioration which we all experience and observe. The tables of mortality, the multitude of early deaths, the rare instances of longevity, and the long list of human maladies, indicate a sad decline from the strength and endurance of the early progenitors of the race.

2. A more interesting inquiry relates to the possibility of renovation. Can the boundary of life be enlarged? Can the limit of threescore years and ten be pushed far backward in the measure of our earthly destiny? Many considerations support the affirmative of the question. Both facts and the reasonable interpretation of general principles authorize the belief that the average duration of life is much shorter than it ought to be. Instances of great longevity are not wanting in modern times, and from them we may learn the essential conditions of longevity.

Thomas Parr, an English laborer, reached the age of one hundred and fifty-two years. His last undertaking was a visit to London, whither he was drawn by the desire of the king to see so rare a curiosity. The sumptuous entertainment now substituted for the homely fare to which he had always been accustomed, killed him. A *post mortem* examination, conducted by Dr. Harvey, revealed a perfectly healthful condition of the internal organs. No sign of decay was visible. Even the cartilages were not ossified, death ensuing wholly from the surfeit of rich food.

Henry Jenkins, of Yorkshire, died 1670, in the one hundred and seventieth year of his age.

The case of the Italian, Cornaro, affords a remarkable instance of renovation. At forty he was brought to the brink of the grave by a career of dissipation. Physicians assured him that speedy death was inevitable, recommending a spare diet in the place of further and useless medication. Having greatly reduced his allowance of food and drink, he rapidly recovered, becoming stronger than ever before. Like a wise man he afterwards adhered to the frugal regimen. Twelve ounces of food, and thirteen of drink,

constituted his daily allowance for sixty years. Meanwhile, by cultivating a philosophic and equable frame of mind, he avoided all extremes of passion and feeling. At the age of eighty, overcome by the importunity of friends, he increased the quantity of his nourishment. This change in diet was followed by dejection, pains in various parts of the body, and in a few days more by a fever, which for five weeks kept him suspended between life and death. On recovery, by strictly observing former habits of abstinence, he lived till his hundredth year in the enjoyment of fine health and unclouded spirits.

This case shows the recuperative force inherent in the human constitution. At the age of forty, Cornaro was prematurely old. Excesses had nearly exhausted the vital fuel allotted to him by the Creator. Yet the residue, by unsparing economy, continued to hold out and reproduce itself for a long period of time.

The pliability of our organs is certainly great. A broad margin in the use of food and drink is tolerated without immediate ill effects. The robust may fare luxuriously for years with hardly a twinge of pain as a reminder of the danger. But long and severe tension will destroy the elasticity of the best bow. The boasted digestion of the epicure at length fails. New stimuli are resorted to and stronger reactions follow. The sufferer learns too late that every superfluous pound of food, requires for assimilation the expenditure of a portion of reserved vital force.

Individuals who have attained an extraordinary age have invariably husbanded their physical resources by rigidly temperate habits. Most of them are found among fishermen, farmers, and others whose pursuits in the open air unite agreeable diversion with wholesome bodily exercise.

One fact often brought to the notice of the attentive observer, is conclusive as to the value of frugality and abstinence. Delicate children not unfrequently reach extreme senility. The grey-haired patriarch will tell you of his early weakness, dwelling at length on the care which purchased a vigorous manhood and hale old age. At a time when temptations were strongest, and visions of pleasure most seductive, fragility of constitution deterred him from indulgences to which hardier comrades gave way. Robust youths fairly brimming with exuberance of life, are prone to tamper recklessly with their glorious gifts. Seldom experiencing pain, lassi-

tude or fatigue, they learn to look upon them as evidences of unmanly weakness. In toil, in sport, in all the wild outgush of nature, they rush to extremes. Under such pressure the machinery of the body is rapidly worn. Iron muscles become rigid, and stiffness settles in the joints. One organ after another fails to perform its work properly, till premature death closes the scene. On the other hand, the valetudinary, carefully, though perhaps unconsciously, pursuing a course of uniform moderation, finally reaches the goal, years after the fleet runners, whose exploits were the admiration of his youth, have disappeared forever from the course.

In your journeyings you sometimes have taken passage in a steamer built chiefly for speed. Her timbers are sound and her joints close. To insure the requisite swiftness, a powerful engine has been incorporated as an integral part of the craft. As the boat gets under headway, you are astonished at the velocity of her motion. But from stem to stern she quivers like a leaf. The planks beneath your feet palpitate incessantly. The suspended lamps, the slack casements, in short all movable objects, rattle in unison with the tremulous jar. You feel assured at once that the boat can not long withstand the wear and tear of the mighty force propelling it.

So excess of whatever character wears out the human frame. Severe bodily labor, close application to books, and the many kinds of violence which may grow into daily habits, make unnecessary drains upon the reserved fund of life. In many cases the supply which might have lasted sixty years, is exhausted in six. "Let your moderation be known," is an excellent sanitary maxim.

The physician of this enlightened age has a higher duty to perform than the simple administration of medicine to the sick. It is incumbent on him as guardian of the public health, to go behind mere symptoms and pains, to investigate ultimate causes, to ascertain by patient research the essential conditions of health and longevity, and then to teach others the truths he has learned. He who is *content* to combat this or that sign of disease with the weapons of the *materia medica*, is stumbling at the threshold of his work. It devolves upon physicians to take the foremost rank in endeavors to improve the physical condition of the race. Many discouragements may deter him from entering heartily upon this high mission, for patients are frequently obstinate pupils. Not a few prefer the

temporary gratification of indolence, intemperance, or luxury, to the lasting enjoyments consequent on rigorous self-government. The doctor must expect to see his warnings disregarded, and his affectionate appeals treated with practical contempt. But let him persevere. The civilized world is awakening to the importance of the subject. It turns discontentedly from the massive wisdom, the ingenious inventions, the sublime discoveries, the God-like triumphs of humanity over material things, to the fragile bodily forms composing the hosts of this all-conquering civilization. Within a few years, medical statistics have been industriously collected. Legislators have aided in gathering the information which is to test the truth of theories. Physiological departments are being established in academies and colleges. Improved sanitary regulations have been adopted in the army and navy. The march of reform has extended to factories, to mines, and to other fields of labor where large numbers are congregated within a narrow compass. Another gratifying feature of the times worthy of our heartiest commendation, is the systematic course of physical exercise adopted in many elementary schools, as a part of the regular training. With so much to offer encouragement in the popular movements of the day, we ought to redouble our exertions for bringing the laws of health home to the knowledge and conscience of the people.

Although hygienic truths have been diligently investigated by members of the medical profession, and now form an invaluable part of medical learning, the community still remains more profoundly ignorant in this department of knowledge than almost any other. They are content to adopt the suggestions of science in the ventilation of public buildings and other matters of common concern, without a thought that the same principles sustain an intimate relationship to their own personal and immediate well-being.

The present generation, like many before it, is suffering for sins not its own. If the living representatives of the race desire to improve its quality, it becomes them to transmit as light a burden as possible to their successors. The capacity for self-recuperation belonging in a greater or less degree to every individual, is ready to aid in the removal of the inherited weight of our infirmities. If the outside causes which foster disease and break the constitution, should cease to operate, evidences of pristine vigor would soon

begin to reappear. God bestowed upon man at first a perfect physical structure. It has been reduced to its present disordered state by errors and sins. Yet through all its misfortunes, we believe the original *possibility* of perfect health has survived, though hidden from view by the masses of corruption which folly has engendered. This obscure *possibility* or germ is evidenced by that quality of the vital principle which sometimes revivifies the system after being worn out by abuses and brought to the brink of dissolution. Reformed drunkards, lifted from their degradation at the last moment compatible with the continuance of life, have slowly regained their lost powers and lived for years. Digestive organs to all appearance hopelessly ruined by pampering the appetite, have become strong again from rigorous abstinence. Infants after hanging over the grave for weeks from the tenuity of the vital thread, and children of the utmost fragility, have through careful nurture, attained to a ripe maturity. When the strong have studiously husbanded the fund of life, they have in repeated instances survived to see more than twice threescore years and ten.

Facts like these show the potency of the principle. Hitherto it has antagonized the effects of all the deadly forces perpetually at war with our existence. For forty centuries it has repaired the inroads made in numberless ways upon the human constitution, preventing the further deterioration of the race. We may reasonably infer that if all mankind should wholly abstain for several generations from actions and habits prejudicial to health, allowing the recuperative power full scope, posterity would in the end regain the noble physical development which our ancestry lost.

And what is to prevent each one from contributing his part, both by precept and example, to forward so glorious a work? The lifelong toil of the parent is sweetened by the reflection that the offspring of his blood will thereby be furnished with the means of improvement and happiness. The benevolent old man plants trees by the wayside that the traveler may enjoy the shade, long after he himself has sunk to his final slumber. The horror of transmitting a tarnished reputation has saved some from the commission of crime. Let such natural and generous impulses widen their sphere of influence. Let the father and mother be as anxious to bestow on their children a good constitution as a large fortune or honored name. Surely, the reward extending far downward into coming

time, and blessing millions yet unborn, will a thousand fold repay for the self-discipline that the man of to-day may feel called upon to practice.

Statistics gratify us with the assurance that the advance of civilization has greatly lengthened the average of life. But present melioration is only a dim foreshadowing of what we may rationally expect hereafter, for the comforts incident to increasing prosperity and wealth are sufficient to have produced it. When to the advantages of better houses, clothing, and food, are superadded the benefits of judicious physical culture; when pure intellectual and moral pleasures take the highest place in the affections, the work of renovation will go forward in a manner worthy of our rapidly progressive civilization.

ARTICLE IV.

HEREDITARY PREDISPOSITION.

The Annual Dissertation, read before the Convention May 22d, 1861.

BY JOHN B. LEWIS, M. D., OF ROCKVILLE.

GENTLEMEN:—One of the pleasing peculiarities of Medical Science is, that it opens an unbounded field of thought and profitable research to the range of its devoted followers; while the great and important discoveries that have there been made, the new and beautiful theories that have from thence been elucidated—theories no less true than beautiful—the practical, the useful, the benevolent results that the civilized world has realized from this fertile field during the last few years, prove not only its vast extent of territory, but also the industrious toil, and untiring zeal of our calumniated, though really benevolent profession.

Whilst, then, many acknowledged truths have been derived from this fruitful source, and numerous facts placed beyond the possibility of dispute, there are still, as is well known to you, not a few inquiries of the greatest interest to mankind, that as yet remain wholly unanswered, or whose solution has not hitherto been satisfactorily determined. It becomes, then, a matter of duty which we owe to ourselves, our profession and our common brotherhood, to pursue attentively some of these inquiries, and gather therefrom whatever facts may have been well ascertained by others; or contribute freely thereto, if happily we can, whatever may tend to the elucidation of so philanthropic a subject.

The main effort of the practitioner of medicine doubtless is to battle with disease; his labors ever urgent, his toils endless. Yet, it has often been both our duty and our privilege to bestow the far greater blessing of prevention or protection, which some of the

more modern discoveries in medical science have rendered so efficacious. The science of prevention, technically known as Hygiene, which had been so long neglected by medical men, has of late demanded and received the attention of many of our most talented physicians. It has become, at last, a fixed feature among our social institutions, so that there are probably few communities among civilized nations, where its laws are not recognized, though unfortunately, seldom wholly obeyed. There is, probably, no department of our elevated science, that can be of more interest to us as medical men. How often do we meet, in our daily practice, with cases of mental or physical suffering which baffle all our skill to cure, but which, through proper agencies, might have been greatly mitigated, or perhaps wholly prevented. How often, in our investigations of disease, are we able to trace back a continuance of bad or doubtful habits, which have finally led to the development of some incurable malady. How often, too, do we witness a constitutional predisposition to disease, which is unquestionably inherited, and in not a few cases the manifest result of excesses committed by parents, and "visited upon the children to the third and fourth generation."

Surely, gentlemen, this is a subject of paramount importance, and worthy of an abler pen than mine. I shall not, therefore, presume to enter upon a discussion of its numerous details, but propose to occupy your attention with a few remarks upon *one* of its many interesting features. I have already alluded to that previous fitness for, or inclination to any disease that is transferred from parents to children, and which is generally understood as hereditary predisposition. It is to some inquiries upon this subject, that I would respectfully request your attention. Now, I would wish to be fairly understood, at the commencement, as making a wide distinction between hereditary *diseases* and hereditary *predisposition.* Generally speaking, the diseases themselves are not inherited, though it seems to be commonly admitted that there are some exceptional cases, where a disease has been communicated directly by a mother to the fœtus. There are numerous instances on record which seem to prove this fact. Well authenticated cases are related of children having been born with all the symptoms of small pox upon them at the time of their birth. In some instances the disease has run its course previous to birth, and the child bears

only the characteristic traces of the disease upon its skin. Similar statements are made concerning syphilis; and it is further declared that tubercles have been found in the lungs and brain of still-born infants whose parents were consumptive. In such cases, the child is born with the disease fully developed, and unquestionably inherited directly from its parents. These, then, clearly constitute hereditary diseases. We are not, however, born with the apoplexy, gout, cancer, mania, consumption, and numerous other affections of our progenitors; but instead, with that inherited *constitutional tendency* to those diseases, which may be deemed the *germ cell of the disease*, and which only await the fecundating influence of age, or other favoring circumstances, when it undergoes a wonderful development, until it at length assumes the characteristic features of the parent disorder. This, then, constitutes the hereditary predisposition to disease, which we all positively know to be, in some instances at least, transmitted from parent to child.

The law of hereditary transmission is by no means one of recent discovery. Some of the earliest writers were cognizant of the fact, and were attentive observers of its workings. HIPPOCRATES gives it a somewhat extended notice, and places much emphasis upon its certain action, especially in morbid tendencies. It has also been referred to by TACITUS, in his historical writings, and at a later date by LUCRETIUS.

Occasional contributions upon the subject may be found among the more modern writers, some of whom have treated it with much skill and judgment. One of the ablest and earliest of these writers was MERCATUS, who a little more than two centuries ago published some valuable ideas upon the nature of such affections as are susceptible of hereditary continuation. His investigations led him to believe that the quality, character, figure, essential structure, proportion or disproportion, whether of one or of several members, as it appears in the offspring, was engendered in the parents, the grandparents or the great-grandparents, and are similar affections or defects to those pre-existing in the ancestors; that nature employs the same instrumentality in transmitting them, whatever may have been their origin, and that children are born similar to their parents, and deformed with like blemishes.*

* "Circa primum, naturam hereditarii affectus genuina diffinitione patefacere studui. Quippe nil alius est quam qualitas, character, sigillatio, modus

At a much later date PORTAL wrote that "not only are the marks of the body transmitted from father to son, but also a resemblance of temper, complexion, and imitations of the mind."

It is a fact well known, from multiplied observation, that children often possess the external form or features peculiar to one or the other of their parents. There are also family faces and family likenesses, which are oftentimes so strongly characterized by particular lines of countenance, that we can distinguish one brother by his resemblance to another, or know a son by his likeness to his father or mother, or even recognize the peculiar feature in persons of the same blood who are more distantly related. In isolated districts, where custom, prejudice, or other favoring causes have tended for a long time to restrain or prohibit the intercourse of a people with neighboring communities, a peculiarity of physiognomy becomes developed, and distinguishing mental and physical characteristics are the well-known result. The early Irish, and the former clans of Scotland, were striking instances of this fact.

A few very able writers, in referring to the subject, are disposed to ascribe this similarity in features and fashion of body to training and education, or to an intuitive spirit of imitation, which leads the child to copy the habits and even the moral qualities of the parent. It is doubtless true, that those who entertain the same current of thought and emotions, may in time acquire such an habitual expression of mind or countenance, as shall lead to a fancied resemblance. It is thus that husband and wife are supposed to grow like each other. But this explanation will hardly suffice for those peculiar resemblances which occasionally come under the observation of every one. HASLAM quotes an example where "a son had the gait, voice and handwriting of his father, though the father died before the son had been taught the use of the pen, and who probably never saw the handwriting of his father."

There are congenital, organic peculiarities also, which in some instances are known to have been transmitted through several suc-

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substantiae, proportio quaedam aut disproportio vel impressis praeter naturam in uno pluribus, aut omnibus membris geniti impressa, a sui ortu ex vi seminis parentum, avorum aut proavorum a simili affectu in eorum, aliquo membro aut membris praeter naturam quoquae praexistente : quo veluti instrumento natura, vel causa alia utitur, ut natos sibi similes gignat et eadem labe foedatos." *Mercatus.*

cessive generations. MAUPERTIS assures us, that there were two families in Germany who have been distinguished for several generations by six fingers on each hand, and the same number of toes on each foot. In our own country we have the well-known instance of Zerah Colburn, the mathematician, who, in common with a large number of his relatives, descending from a common ancestor, had six fingers and six toes. This peculiarity was readily traced through four generations. Beyond that the pedigree was lost, or it probably could have been traced through many more. PLINY has mentioned examples of six-fingered persons among the Romans; such individuals received the additional name of sedigitus or sedigita. HALLER gives an account of a web-footed family, whose father, grandfather and great-grandfather were all web-footed before them. I am myself acquainted with a family who have a remarkable deformity of the feet, which peculiarty is known to have existed through several successive generations. The thick lip introduced into the Imperial house of Austria three centuries ago, by the marriage of the Emperor *Maximallian* with *Mary* of Burgundy, is yet visible in their descendants. WATSON gives the case of a gentleman "who had the misfortune, some years ago, to have a bastard child laid to his charge. At first he had some misgivings on the subject, and suspected that he might have no title to the credit, or rather discredit, of the imputed paternity; but all his scruples were satisfied when he found that the child had six fingers on each hand, for he had himself possessed two small supernumerary fingers, which had been amputated when he was an infant."*

In speaking of the hereditary transmission of organic qualities, an inquiry of no little interest and importance naturally suggests

* A writer in the Westminster Review [April, 1860,] mentions a Maltese couple, named Kellia, who had born to them a son Gratio, who possessed six perfectly movable fingers on each hand, and six toes, not quite so well formed, on each foot. Gratio married a woman with ordinary hands and feet, and their eldest son, Salvator, possessed the hexadactyle members of his father. Their three other children had the pentadactyle limbs of the mother. All these children grew up and were married to normal wives and husbands. Salvator had four children, three of whom exhibited the peculiar hands and feet of the father and grandfather. The same hereditary peculiarity appeared also in the progeny of the brothers and sister of Salvator, being reproduced in the grandchild, though failing to appear in the child.

itself; namely, whether *acquired* conditions of body can be transmitted? The lower animals have often furnished means for experimental investigations in physiological science, and much interesting evidence has been thus derived, that has a direct bearing upon this inquiry. "Every one conversant with beasts," says an able writer in the Edinburgh Review, "knows that not only their natural, but many of their acquired qualities, are transmitted by the parents to their offspring." The writer then goes on to relate a curious example of this latter fact, in the Pointer dog.

In the Philosophical Transactions for 1813, Col. Humphries, F. R. S., relates an instance of a new breed of sheep arising from a lamb having been born with singular proportion and appearance. It appears that a Massachusetts farmer, named Seth Wright, who was the proprietor of a farm on the banks of the Charles River, possessed a small flock of ordinary sheep. In the year 1791, one of the ewes presented her owner with a male lamb, possessing very short, bandy legs, with the ordinary long body of the common sheep. It was observed that his deformity rendered him less able to jump over fences, which was considered a quality worthy of propagation. The young ram was therefore carefully preserved and bred from, and many of his offspring inherited his deformity. These were made to interbreed with one another, and the result fully justified the anticipation of the owner. An entire new breed of sheep was thus produced, and was called the Ancon or Otter sheep.

Mankind, zoölogically, is subject to the same laws which govern all animals; and it is doubtless true that the numerous defects of mind and body, which are so easily induced by our unnatural habits, are handed down to posterity, and thereby tend to impair the beauty, symmetry, and physical development belonging to our race. Fortunately, however, acquired physical peculiarities, when the result of art or accident, are generally not transmissible.

"Many nations," says Dr. Pritchard, "mould their bodies into unnatural forms; the Indians flatten their foreheads; the Chinese women reduce their feet to one-third their natural dimensions; savages elongate their ears; many nations cut away the prepuce. We frequently mutilate our domestic animals by removing the tail or ears; and our own species are often obliged by disease to submit to the loss of limbs. That no deformity or mutilation of this

kind is hereditary, is so plainly proved by everything around us, that we must feel some surprise at the contrary opinion having gained any advocates. After the operation of circumcision has prevailed for three or four thousand years, the Jews are still born with prepuces, and still obliged to submit to a painful rite. Docked horses and cropped dogs bring forth young with entire ears and tails. But for this salutary law, what a frightful spectacle would every race of animals exhibit! The mischances of all preceding times would overwhelm us with their united weight; and the catalogue would be continually increasing, until the universe, instead of displaying a spectacle of beauty and pleasure, would be filled with maimed, imperfect, and monstrous shapes." In view of these facts, therefore, I think we are justified in adopting the opinion, that those peculiarities in bodily structure that are *born with the individual*, have a tendency to become hereditary; while changes in appearance or constitution which are the result of accident or disease, and which happen *posterior to birth*, generally terminate with the individual, and have no influence upon the offspring.

Admitting, then, the fact of hereditary transmission, as it presents itself in the external form and features of the individual, are we not prepared to believe that the same cause may lead to essential peculiarities, in form or structure, of the important internal viscera? For numerous reasons, we must necessarily conclude that such results do follow. We know that decided variations in the form and capacity of the skull has corresponding peculiarities attending the cerebral mass within it. We know, too, that that which determines the different races of mankind, for the most part lies in the hereditary transmission of some characteristic peculiarity in the size, shape, and perhaps constitution of the brain. It is quite certain that the cerebral development in the European, American, Negro, Hottentot, Malay, and Australian, differs as widely from each other as does the external configuration of their skulls. To this fact we attribute the equally conspicuous differences in the mental attainments of the respective tribes. The hereditary predisposition to those peculiarities which characterize the different races, is obviously but the working of the same physiological laws which, in a modified manner, govern the liability of an individual to inherit the family qualities of his ancestors. So far, then, as concern pathological conditions which arise from some or-

ganic defect, it can not be a matter of surprise that a peculiar and decided predisposition to such conditions must exist in the offspring inheriting such peculiarity of structure.

It is, however, notoriously true, that diseased action does not invariably follow hereditary tendency to it. There is a striking fact observable in hereditary dispositions, which sometimes permits an individual to altogether escape the family idiosyncrasy, or at least, if it be inherited, it seems to lie dormant through life. But even in such instances the predisposition is not always lost. It may fail to show itself in one generation and yet appear in the succeeding. The child escapes the disease which reappears in the grandchild or great-grandchild. We can only account for this curious alternation by supposing that the individual who seemingly *transmits* an hereditary malady which he does *not possess*, does so by virtue of the latent principles of the predisposition which he has inherited, but which in his case have never been developed. As it is not disease, but a predisposition to it which is inherited, it follows that in all cases there must be sufficient exciting cause for its development. An individual may be so fortunate as to escape those causes, or certain physical conditions may occur which serve to counteract them, and yet hand down the constitutional tendency to his children, in whom may break out the old disease of the grand-parent.

It has been supposed by some, that in the propagation of hereditary peculiarities, the father's influence was stronger and more certain than the mother's. I presume this opinion has sprung from the fact that the offspring of two distinct varieties, whether of the human family or of the lower animals, more generally resemble the father in feature and constitution. Thus, in the case of equine hybrids, the physical characteristics to the common mule are well known. The mule, which is the offspring of the male ass and the mare, inherits more of its sire than of the horse, both in the shape of its head and ears, and in its disposition. On the contrary, the horse's likeness greatly predominates in the hinny or bardeau, which is the offspring of the horse and the female ass. *Bardo ex equino et asina.* The hinny is little esteemed in the United States, and but rarely seen. The head is comparatively small, the ears short, the disposition rather that of the horse, and the voice is not a bray, but a neigh. Similar facts are observed in the ox tribe

and in canine hybrids. Dr. MORTON observes that "when the pure white man is crossed on the negress, the head of their mulatto child ordinarily resembles more the father than the mother; but where a negro man has been coupled with a white woman in their offspring, the color, the features, and the hair, of the negro father greatly preponderate. In the common *mulatto*, the degree of intelligence is absolutely higher than in full blooded negroes. About this deduction, no dispute exists among medical practitioners in our Southern States, where means of verification are peculiarly abundant."* But of the grade of intellect in the other variety—that is, in the product of the white woman and the negro man, Dr. Morton's observations were not sufficient to enable him to state decidedly. Dr. Pritchard remarks that "in cases of intermarriage between a dark-haired and one of an opposite or xanthous variety, the complexion of the offspring is seldom intermediate, but resembles that of one of the parents, for the most part that of the father." Judging from these analagous facts, it is possible that the father's influence in the transmission of morbid tendencies, may be more powerful than the mother's; but we need more statistical evidence upon the point before the accuracy of the opinion may be placed beyond doubt.†

Marriages of consanguinity, I am convinced, have a strong influence upon the development of hereditary idiosyncrasies—that the offspring of parents who are themselves blood relations, are much more certain of inheriting family peculiarities and infirmities, than are the children of parents who are not connected by ties of blood relationship. The influence of blood intermarriages upon offspring seems to exaggerate and develop such tendencies to family infirmities as may exist in the parents, although the infirmities may be so trivial in the parents themselves as to lie dormant or unnoticed. It is not at all singular that the offspring of family intermarriages should be peculiarly susceptible to hereditary influences; for if any peculiarity is in any way hereditary, it is but reasonable to suppose that intermarriage would render it doubly so. Much labor has been bestowed, and many learned papers have been written to prove, either the truth or the falsity of the popular assertion, that mar-

* Types of Mankind.—*Nott and Gliddon.*

† LUGOL, in his treatise on Scrofula, regards the transmission of that disease as "inevitable when it comes from the father."—*Page* 75.

riages of consanguinity tend to the deterioration of the offspring. In discussing this question *per se*, I can readily believe that different opinions may be entertained, and opposite conclusions reached. But when we look at the matter in the relation which our immediate topic is necessarily brought to bear upon it, I think that much of the difficulty is overcome. It does not follow, because in one thousand cases of marriages of consanguinity the offspring of nine hundred have been in some manner deficient, that such is invariably the rule—for we may easily collect observations of precisely similar defects in the children of parents who are not connected by ties of blood. Again, many instances of marriage, or incestuous intercourse between blood relations of the nearest degrees of relationship, have produced children who were at least equal, physically and mentally, to any others. In such cases, however, the parents have almost always been uncommonly robust, and found to possess no known family idiosyncrasy. Let there be any remarkable physical or mental deficiencies in such parents, however, and we shall find, as an almost unexceptionable rule, that these deficiencies are reproduced in an exaggerated form in the offspring. So generally will the results of observation go to substantiate what is here advanced, that one is led to believe that it is hereditary predisposition which determines the weal or woe of such offspring.

That peculiar condition of organism which we denominate *temperament*, is remarkably subject to continuation in the offspring. It may be well to give this fact something more than a passing remark. We generally understand by the word temperament, as here used, a predominance or disproportionate development of some one or more of the vital organs. Such a peculiarity of development, although often in itself consistent with perfect health under suitable precautionary measures, is nevertheless generally admitted to be a predisposing cause to certain disorders; the different varieties of temperament each preferring, so to speak, their favorite class of diseases. This inequality of development, when strongly marked, is usually observed as affecting the nervous, the bilious, or the lymphatic systems; or as sometimes more strongly manifest in the circulation of the blood, and constituting that which we designate as the sanguine temperament. Each of these has not only its peculiar influence upon the physical health, but also a decided

effect upon the faculties of the mind. When we find in the parent a temperament prominently marked, and especially when both parents possess the same physiognomical development, we may surely expect, not only to find the same condition reproduced in the offspring, but oftentimes subject to such an exaggerated development, as to induce that morbid state of body which we denominate a *diathesis*. This condition of body can no longer be considered consistent with health and longevity; but disease itself, if not early manifest, is continually threatening, and requires the interference of well-regulated hygienic measures. We look upon our patients, under these circumstances, as possessing a scrofulous, a rheumatic, a syphilitic, or some other specific diathesis—that is, with a constitution highly susceptible to some of these particular diseases.

Careful observation has determined that the lungs and brain are the organs more generally susceptible to hereditary influences, and the diseases of these organs are usually regarded as those most liable to hereditary continuation. Thus scrofulous disease, or that particular form of scrofula which we commonly designate phthisis pulmonalis, is perhaps the most widely diffused of any inherited diathesis. Other affections of the brain or lungs—namely, asthma, apoplexy, epilepsy and insanity, are also liable to be reproduced in the offspring. The same may be said of some diseases of the skin, and of cancer, gout, rheumatism, urinary calculi, cataract, deafness, and perhaps of some other disorders.

We have mentioned *scrofula* as the most widely spread of all inherited affections, and when we regard the extreme mortality of this frightful malady, the subject becomes one of intense interest and importance. No other disease so commonly destroys its victims in early life. Even the fœtal existence of the scrofulous subject is one of extreme peril, as at least one-fourth of such children die during the term of intra-uterine life. The frequency of such abortions are well-known, and the fact seems to indicate an intense degree of disease existing in such children. Of those who are born alive, fully one-half are cut off by death in infancy. It complicates all the diseases of youth and of adult life, and renders them full of danger. Finally, the very few who reach a more advanced period of life, are extremely liable to cerebral affections, cutaneous ulcers of a most intractable kind, malignant disease, and in the female sex, to obstinate uterine diseases.

Hereditary predisposition to scrofulous diseases, is not generally denied by authors. On the contrary, it is regarded by many as not only the most common cause of scrofula, but it is even doubted by some whether the disease can originate *de novo*, by reason of any other than hereditary influences. LUGOL, in an able treatise, remarks that "inheritance is the general cause of scrofulous diseases, and the only one we have been able to recognize and detect. Our investigations on the pathological causes, and external occasional causes, have satisfied us that they have but little influence, while our inquiries as to the health of parents whose children are scrofulous, have constantly presented the same results."* Again, he says, "My opinion becomes more and more confirmed that those affected with phthisis inherit it. I know of no well ascertained fact of phthisis pulmonalis supervening in a man exempt from all hereditary predisposition to this fatal disease."† On carefully interrogating scrofulous patients, we generally ascertain that the disease is known to have existed in some branch of the ancestral tree. But there are occcasional, obscure cases which are by no means so easily accounted for. Whole families of children whose ancestors were themselves apparently free from all scrofulous taint, have died of consumption. One after another, at about the period of puberty have, without any apparent or known cause, passed gradually into that peculiar kind of cachexia, popularly called a *decline*, and ultimately die of phthisis. LUGOL disposes of such cases in this manner: "When the origin of the disease does not seem referable to the health of the parents, we soon satisfy ourselves of the occasional causes to which it might be subject, and if these causes do not exist, we admit inheritance. One of two things must then be the case—either the scrofula must be hereditary, or there is an effect without a cause. We say it is hereditary, and this is true of the upper and middle classes of society, who are subject to hereditary causes, but are not liable to external influences which could render individuals scrofulous; this is also true of most artizans, whose health is strengthened by labor till it procures for them the comforts of life. Inheritance must also be admitted in cases of this kind, for another reason, because it is very possible that the physiological state of one of the ancestral parents may be injurious to the

* Lugol on Scrofula.—*Page* 11. * Ibid.—*Page* 126.

generation, which however, is not sufficiently marked for us to detect." Perhaps the great difficulty in the way of a more satisfactory explanation of this matter, lies in the fact that our present limited knowledge of disease does not enable us to determine with sufficient accuracy, the boundaries that divide a state of health from that of disease. For it often happens, that in cases such as we have supposed, when children die of consumption and the parents were at the time apparently free from all tendency to scrofulous disease, that in after years one of the parents may become a victim of the self-same disease. When such is the fact, it seems to show that the morbid tendency was in all probability transmitted to the children, in whom the disease became developed at a much earlier period than in the parent.

Some direct experiments have been made which seem to elicit at least negative evidence, and go to prove that scrofulous affections, or a predisposition thereto, is not communicable in any other manner than by inheritance. These experiments consisted in the introduction of tubercular matter into the circulation of animals; and in quite a number of instances, the repeated inoculation of the human subject with matter derived from scrofulous ulcers. No other result followed than to lead to the opinion just stated—namely, that the inoculated person was not thereby rendered susceptible to the disease. This fact is also of some importance as enabling us to know that there can be no possible introduction of a scrofulous taint into the system by the use of vaccine virus.

We have enumerated *spasmodic asthma*, *apoplexy*, and *epilepsy* among those diseases which are subject to hereditary influences. These affections are seldom developed sooner than middle life, unless we except epilepsy, which sometimes commences with infantile convulsions. There are numerous instances where the tendency to each of these diseases is known to have been transmitted through many successive generations. In such cases they unquestionably depend upon some organic peculiarity which predisposes the patient to the disease; but no peculiar pathological condition has yet been revealed that has a tendency to throw much light upon the subject.

I need hardly remind this Society of the utmost importance, both in a legal and a moral point of view, that attends the investigation of hereditary disposition to *insanity*. Though there are un-

questionably numerous cases of mental derangement where no disposition to insanity has been known to exist among the ancestors, yet the facts that have been reached by careful tabular statements, prove but too surely that a large proportion of the causes of insanity are of a purely hereditary origin. Where deranged manifestations of the mind have long existed in a family, and a number of generations have been affected, the danger of insanity becomes fearfully greater. SPURZHEIM* thinks it more natural to explain hereditary insanity, like all other hereditary dispositions, by the corporeal conditions by which the powers of the mind are manifested. Sight and hearing are endowments of the mind; but there is hereditary blindness and deafness on account of the material conditions on which the power of seeing and hearing depend. In the same way he considers hereditary idiotism, and every hereditary predisposition to insanity, as the result of the bodily apparatus by which the faculties of the mind are manifested.

While it is true that hereditary tendencies manifest themselves more commonly in affections of the brain or lungs, it is also well known that the same influences are often an important predisposing cause in some *diseases of the skin.* Every practitioner must have observed this fact. It is not always the self-same affection of the skin, or the tendency thereto, that is transmitted from parent to child; but it is generally the case that the disease in the child, if not identically the same, is one of the same *class* of diseases which characterize the parent affection. This is particularly observable in *squamous* diseases. Erysipelas is also one of the skin affections which sometimes manifest a strong tendency to hereditary transmission. I am well acquainted with a family in whom the tendency to this troublesome disease is known to have been transmitted hereditarily for several generations; and notwithstanding numerous healthy alliances by marriage, the offspring have uniformly been to a greater or less degree, afflicted with the family disease. So invariable has been the fact of its hereditary continuation, that one of the family in speaking of it remarked, that Erysipelas and ——— (the family name) must be synonymous terms.

The hereditary transmission of the malignant diathesis, giving rise to the varied forms of *cancer,* is too common a fact not to have been recognized at all periods. As it is usually a disease of adult

* Spurzheim on Insanity.—*Page* 105.

life, it is highly probable that in numerous cases the disease is attributed to other than hereditary causes. Often when there has been a well known predisposition existing, the disease may not manifest itself till manhood is attained. "In the majority of instances it is about the commencement of the latter stages of life—from the ages of forty-five to fifty-five—in both sexes, that the system begins to indicate its inability longer to conceal the accumulating load of inherited evil. Often the infliction of some external injury, of so trifling a nature as scarcely to have produced a momentary disturbance of a child's temper, will be sufficient to set in motion a series of disasters that shall not cease but with life. The slight blow or contusion, the situation of which had been lost or forgotten, will, after a length of time, reappear as a bruise or a tumor, and the localization of a constitutional taint is thus determined. In some cases it breaks forth without any accidental cause whatever, while in others the external phenomena are preceded by constitutional changes of a nature peculiar to this diathesis."*

Gout is generally admitted to be hereditary in predisposition; and *rheumatism*, to which it seems closely allied, is supposed also to be liable to hereditary continuation. There can be little doubt that the gouty diathesis is often generated by too great indulgence in a full and luxurious diet, especially if combined with sedentary habits: but the disease is much more likely to occur, *ceteris paribus*, in the offspring of gouty ancestors, than it is in other persons. Of 522 gouty patients, according to Sir Charles Scudmore, 332 acquired the predisposition by inheritance. In 113 patients, 32 could trace the disease to the father; 9 to the mother; 3 to the father and mother; 6 to the grandfather, and 1 to the grandmother, in which cases the disease had made a leap over a generation; 3 to the uncle, and 1 to an aunt; while in the pedigree of the remaining 58 the disease could not be traced.

It is a well known fact that there exists in some persons a morbid disposition to the deposit of lithic acid and the lithates, constituting that which is called the *lithic diathesis*. With all the labor that has been bestowed upon it, the etiology of these depositions is still very obscure. Under some circumstances the formation of these concretions seem to be intimately associated with a gouty

* Whitehead on Hereditary Diseases.—*Page* 29.

state of the system. Perhaps the condition of the blood, which is known to be abnormally charged with fibrin in both the gouty and the calculous diathesis, is chemically the same which, in the one instance leads to a chalky deposit about the joints, and in the other to the formation of urinary calculi. Let this be as it will, it has been sufficiently proved that a constitutional tendency to these deposits often exists in the offspring of persons who have themselves been afflicted with calculous depositions.

There is an undoubted hereditary tendency, in some families, to *cataract* and other affections of the eye; and the same remark is as truly applicable to the various defects causing *deafness*. Most cases of impairment of any of the special organs of sense, which are referred to a hereditary origin, are generally attributable to some organic defect which has existed from birth.

We have thus recapitulated the more important affections that are liable to hereditary transmission. There are also numerous instances on record of other disorders which have had their origin in hereditary influences, but the matter becomes greatly simplified, if we admit that "in all diseases to which a predisposition was inherited, the blood is the part of the system where the germ of the hidden evil is to be found, the pabulum which fosters its existence and growth, and the medium through which alone we can remedially or curatively operate." *

With reference to the curative treatment of this class of diseases, it is not within the purpose of the present occasion to remark. All efforts that are likely to be of much avail must be principally of a preventive kind. A knowledge of all the facts relating to hereditary influences, however complete, may not enable us to institute a more effectual treatment for the removal of disease, after it is once fully established; yet it will often give us the opportunity of placing those of our patients, who are more immediately in danger of hereditary influences, so on their guard against all excesses and exciting causes, as to effectually ward off or delay the threatened malady.

If we could trace it back to its original starting-point, we should doubtless find that each and every hereditary taint that is now productive of so much mischief, had its origin in the vicious habits or

* Whitehead's Hereditary Diseases.—*Page* 65.

excesses of some ancestor more or less remote. There has been, assuredly, a time when these unhealthy predispositions did not exist. It also requires but a brief investigation to determine that the causes which tend to the production of hereditary maladies are continually at work, and undermining the foundation of both our physical and mental structure. All excesses, both of mind and body, tend not only to impair the physical frame, but also to engraft feeble constitutions upon the offspring of those persons who abandon themselves to such excesses. In too many instances for the welfare of our race, has it proved true that "the fathers have eaten sour grapes, and the children's teeth are set on edge."

An evil so wide-spread, and attended with such fearful consequences, as is that of an inherited predisposition to the most incurable and destructive diseases that afflict mankind, is assuredly a subject deserving of serious investigation. Philanthropy naturally raises the question—what can be done to remedy or eradicate so great an evil? In olden time, when the "chief end of man" was to bear arms against a foreign foe, it was deemed prudent not to permit sickly infants to grow up. The legislation of ancient Sparta ordered the sacrifice of those children who were too feeble ever to become useful in defending the country. "This revolting custom, at least, would spare the new-born babe the infirmities attached to a suffering existence, and it also had the advantage of preventing those individuals from propagating, and from giving birth to children whose fate would be still more unfortunate than theirs; and finally, it was the means of preventing marriages, except between healthy persons." The civilization of our day holds up its hands in holy horror at the mention of such sacrifices, and yet it scruples not to violate nature's wisest laws, and thereby begets a feeble, sickly, scrofulous race, that grows up a living sacrifice to its parents' follies. The propagation of hereditary maladies, and especially of scrofulous affections, by marriage, is a fact too fully established to require an extended notice. While it is not expected, or even considered necessary, that all persons predisposed to scrofula and kindred diseases should remain in a state of celibacy, it is at least desirable that when the marriage of such persons be determined, that it be subject to certain measures of precaution.

In the first place, it is of importance that such persons enter upon a matrimonial connection at an appropriate age. Precocious

marriages are notoriously productive of a feeble offspring, and the same thing is known to be as true, when the parents have passed the meridian of life. According to LUGOL, whom we have before quoted, twenty-five years is the earliest age at which a man should marry, as all marriages contracted before this period of life are liable to be followed by an effeminate offspring. Neither should a scrofulous female marry under the age of twenty-one years. It is also of importance that the parties be not of the same temperament, which of itself, as we have previously shown, is productive of much evil. Nor ought they to be in any wise subject to the same morbid predisposition, and above all other considerations, of the same blood relations. These are facts, which, though well known to physicians, are not generally understood or appreciated by the community at large, whom it so seriously affects. Should there not be a more general diffusion of intelligence upon a subject that so nearly concerns the welfare of our race?

"The seeming severity of the law of hereditary transmission, is tempered somewhat by its certainty and uniformity, and the absence of all necessity, in the majority of instances, that we should subject to any of its penalties our coming posterity." When men arrive at the perfection of reason, but not till then, they will govern themselves fully by considerations such as we have suggested. In the mean while, it is the duty of our profession to urge them on all fit occasions, and thus to modify, if we can not control, the conduct of those whom we advise; to approximate as nearly as may be, the good we can not absolutely attain.

ARTICLE V.

SANITARY REPORT.

Read before the Hartford County Meeting, April, 1861.

BY L. S. WILCOX, M. D., CHAIRMAN.

THE Sanitary Committee appointed for the year 1860, would respectfully submit the following report:—

The whole number of deaths in the County, during the year 1860, was 1,530: of males, 769; females, 750; sex not stated, 11.

There occurred during the first year, 304 deaths; from the first to fifth year, 296; from 5 to 10, 96; 10 to 20, 80; 20 to 30, 139; 30 to 40, 113; 40 to 50, 87; 50 to 60, 112; 60 to 70, 98; 70 to 80, 109; 80 to 90, 57; 90 to 100, 12; age not stated, 27.

These deaths, by classification, were—from zymotic diseases, 431; from diseases of uncertain seat, 147; nervous organs, 202; respiratory organs, 346; circulatory organs, 33; digestive organs, 66; urinary organs, 10; generative organs, 16; locomotive organs, 9; integumentative organs, 1; old age, 57; violence, 81; unknown, 91; still-born, 40.

The census for 1860 affords an opportunity to ascertain the exact percentages of deaths to the populations of the county and towns. The percentages have been ascertained for the county and for all towns numbering more than three thousand inhabitants, and those numbering less than one thousand. They run thus: for the whole county, 1.69;—of towns of the first class: for Hartford, 1.43; New Britain, 1.84; Bristol, 0.9; Enfield, 1.62; Farmington, 1.45; Glastenbury, 1.56; Manchester, 1.73; Southington, 1.93; Suffield, 1.84; —of towns of the second class: for East Granby, 2.64; Hartland, 2.11; Marlborough, 3.23.

Burlington returns the highest mortality rate of all towns in the county—it is 3.79; its population is 1,028. Bristol has the lowest average mortality, it being 0.9; its population is 3,436; and generally the small towns have a higher relative mortality than the large, by a ratio of nearly two to one. This high rate for the small towns, is only temporary. The mortuary bills for preceding years exhibit a lower percentage.

The whole number of deaths in the county for 1860, exceeds that of 1859 by 199. This excess is distributed principally, indeed almost wholly, among the following classes, viz.: zymotic diseases; diseases of uncertain seat; of nervous organs and respiratory organs. The excess in the class of zymotic diseases is 106; of respiratory organs, 46.

Two or three circumstances may be mentioned as possible causes for this large increase in the number of deaths from diseases of these classes: 1st. The meteorological condition of last year was one of unusual moisture. 2d. The towns of greater mortality have a large exposure, both in respect to soil and situation, to moisture and high winds. If this second circumstance may be included under the first, it is also, so far, confirmatory of the asserted legitimacy of both as acting causes. 3d. An epidemic influence has prevailed in some parts of the county, manifesting itself particularly in Diphtheria.

The number of deaths returned from this disease is 74. They nearly all occurred in the course and vicinity of the Farmington river. Thus Canton returned 15; Burlington, 8; Farmington, 4; Avon, 5; Simsbury, 3; East Granby, 1; Suffield, 16.

The first notice of this disease by the mortuary bills, was in 1859. Its stealthy approach had already fatally surprised many unfortunate victims, and to-day many of our households are feeling the desolation of its early, covert ravages.

Nothing is hazarded in asserting that the more this disease is studied, the more it expands and spreads away into doubt and obscurity, presenting to the physician the oppressive, paralyzing presence of an image, dark, formless and terrible.

If it is not out of place, one or two considerations may be presented, that indicate a low average vitality and viability in the female, as compared with the male, during the years of life from five to forty-five. These considerations will be drawn from the death and birth tables.

The average mortality of females, under five years, stands for the past five years in ratio to that of males, at 100 to 116.8. But from this age, on to forty-five, every decennial period brings in a larger mortality for the female than for the male. This unexpected result—omitting the process by figures—is contrary to the accepted expression of extended mortuary reports; and is so far confirmatory of the indication already suggested.

The ratio of births for the past five years stands at 100 for females to 114.04 for males. Now most physiologists give as forces determining the sex of the new being, these two prominent ones, viz.: greater relative age, and greater relative vitality.

Hofacker in Germany, by a rigid application of this rule in regard to age, found the ratio of births to stand at 100 females to 103.4 males, where the age of the father was from one to six years greater than that of the mother. Sadler also obtained nearly the same result in Britain.

By comprehensive averages of the whole of Europe, the births were as 100 females to 106 males, where the preponderance of age on the side of the husband is undoubtedly greater than from one to six years. Now the assertion may be safely ventured that in this county, the relative age of the husband does not preponderate more than from one to six years, which on the results already stated, would suggest an anticipation, in the births, of a ratio standing at 100 females to 103.4 males, provided that the relative vitality of the mother is as great as it is in Europe. But the ratio stands at 100 females to 114.04 males, forcing the conclusion upon us, that if these data are reliable, the vitality of the mother here, is very low compared with that of the European mother; and both results point to the inference already drawn, viz.: that in this county the relative vitality of the male, from five to forty-five, is greater than that of the female. This result, of however doubtful derivation, chimes in with the painful apprehensions of anxious observers of public health.

Suspicions of the correctness of the hygienic regime under which females are growing up, often arise and are often expressed. In this respect, emphatically, society has not yet found its true, robust position. Its right physiology is yet to be constructed.

BIOGRAPHICAL NOTICE

OF

PROF. WILLIAM TULLY, M. D.

BY HENRY BRONSON, M. D., OF NEW HAVEN.

WILLIAM TULLY was born at Saybrook Point, Conn., February 18, 1785. He was a descendant of John Tully, who came from England in 1647. His grandfather was an intelligent farmer. His parents, William and Eunice Tully, had but one child, the subject of this notice.

Young Tully manifested, from an early period, a taste for books, which his parents indulged. Till the spring of 1801, he was sent to the Public Free School of his district. He was then placed under the charge of the Rev. Frederick W. Hotchkiss of his own parish, who instructed him, first in English studies, and afterwards in Latin and Greek, preparatory to college. In September, 1802, after an "exceedingly defective preparation," (to use his own words,) he was admitted to the Freshman class of Yale College, where he was graduated in September, 1806. Throughout his academic course, he was embarrassed by his want of knowledge of Arithmetic and Mathematics, these branches of study having been wholly neglected in his preliminary education. This early neglect, and the poor proficiency which he regarded as its consequence, he had occasion to deplore throughout his life.

For five months, beginning in November, 1806, Mr. Tully taught the Oyster River District School, Saybrook. In the spring of 1807, he began the study of Medicine with Mason F. Cogswell, M. D., of Hartford. In October of the next year, he went to Dartmouth College, Hanover, N. H., and for three months, attended the public medical lectures of the celebrated Nathan Smith, M. D., who

taught Theory and Practice, Surgery, Materia Medica, Obstetrics and Chemistry. At the close of the term, he returned to Dr. Cogswell's office; but in October, 1809, went back to Hanover, to attend a second course of lectures. At the close of the term, he studied, for a time, with Samuel Carter, M. D., of Saybrook; but in March, 1810, entered the office of Eli Ives, M. D., of New Haven. While with Dr. Ives, he gave particular attention to Botany, laying the foundation for a general and very accurate knowledge of that science. In the following October, he was examined at New Haven, and received a license from the President and Fellows of the Connecticut Medical Society to practice Medicine and Surgery. The honorary degree of M. D. was conferred on him by Yale College in 1819.

After receiving his license, Dr. Tully taught a district school for five months in Saybrook; but in May, 1811, went by invitation, to Enfield, in this State, to practice Medicine. He soon, however, was attacked with typhus, and on recovering, was summoned to attend his father in his last illness. He returned to Enfield in March, 1812, and removed thence to Milford in March, 1813. While in Milford, it is reported that he spent much of his time in the fields studying Botany, his professional business being very limited. Dissatisfied with the place, he left it in November, 1816, and settled in Middletown Upper Houses, whence he removed in September, 1818, to the city of Middletown. While there, he published in 1820, in Silliman's Journal of Science, a medico-botanical paper, "On the Ergot of Rye." He became the intimate friend of that learned and distinguished physician, the late Thomas Miner, M. D., of Middletown. The two, in 1823, published a volume entitled "Essays on Fevers and other Medical Subjects." It consists of two parts, the first, purporting to be written by Dr. Miner, contains fifteen essays, the longest being one "On the Resolution and Treatment of Fevers." Some of these fifteen essays, (not including the one named) are believed to have been furnished by Dr. Tully. The second part, by Dr. Tully, contains three papers on the Fevers of Middletown and Chatham, and one entitled an "Analysis of 'an Account of an Epidemic Fever of Virginia, by John L. Miller.'" There were unity of purpose and harmony of views on the part of the authors, and the book, throughout, is written with decided ability. It contained new and startling opinions, enforced by a strong

array of facts and arguments, and was like a bomb-shell thrown into the camp of the profession. It treated old and cherished prejudices, and the current methods of practice, with little ceremony, sometimes with caustic severity. The authors maintained that the fevers of the day had decidedly typhoid tendencies; that anti-phlogistic and reducing measures were contra-indicated; and that a free use of stimulants, such as brandy, opium, cinchona, cantharis, capsicum, &c., was required. Opinions as to the merits of the work, which was extensively read, were divided. A controversy concerning the nature of the prevalent fevers, and the comparative excellence of the new and old practice, was begun in this State. It lasted for several years, and was not always conducted in the most tolerant spirit. As a consequence, a prejudice was engendered against the authors of the book, which neither survived. But whatever opinion we may entertain as to the soundness of the views put forth in the volume, there can be no doubt about its substantial value. It is one of those books which will bear to be read more than once.

In June, 1822, Dr. Tully removed to East Hartford, where he was residing when (in July, 1824) he was appointed Professor of Theory and Practice in the Vermont Academy of Medicine, Castleton. He accepted, and in January, 1826, went to Albany and formed a professional partnership with his Castleton associate and intimate friend, Alden March, M. D. Here his business was prosperous, more so than it had ever been before. He spent term-time in Castleton, and in 1829 and afterward discharged the additional duties of Lecturer on Materia Medica and Therapeutics, giving two courses in the year. In 1835, a spring term was added to the autumnal. He continued his connection with the Vermont Academy till 1838, when he resigned.

While residing in Albany, Dr. Tully published in the January and April numbers of the American Medical Recorder for 1828, his "Medical Prize Essay" on Sauguinaria Canadensis. It is a paper of eighty-four pages, alike distinguished by original observation and thorough and elaborate medical scholarship. It may be pronounced one of the most important contributions to our veget able indigenous Materia Medica which has yet been offered to the public.

In 1829, Dr. Tully succeeded Eli Ives, M. D., as Professor of Materia Medica and Therapeutics in Yale College, and in May,

1830, removed his family to New Haven. The different periods of the year in which the terms were held, enabled him to continue his lectures in Castleton. During his residence in New Haven, everything for a time seemed to move on satisfactorily. His distinguished reputation secured him many friends and a reasonable share of professional business. In January, 1832, he published in Silliman's Journal, "Results of Experiments and Observations on Narcotine and Sulphate of Morphine," a valuable paper of seventeen pages. This article was republished in the Boston Medical and Surgical Journal, together with certain additional matter. Several other communications on articles of the Materia Medica, from the same pen, appeared in the last named Journal, during the same year, (1832.) In 1833, he was invited to a professorship in the Medical College of South Carolina, which he declined.

Dr. Tully's last course of lectures was delivered in New Haven in the winter of 1840–1. Soon after he resigned. Subsequently, he spent nearly a year in South Carolina, without his family. In the spring of 1851, he removed to Springfield, Mass., where he died, February 28, 1859. His remains were interred in the Old Cemetery, New Haven, by the side of his wife and several of his children. His wife Mary, a daughter of the Rev. Elam Potter of Enfield, Connecticut, an excellent woman though a great sufferer from ill-health, died September 8, 1853. They had ten children, three of whom, two daughters and one son, survived their father.

While residing in Springfield, Dr. Tully gave to the world his great work entitled "Materia Medica or Pharmacology and Therapeutics," in two thick volumes. On this, his reputation as a medical scholar must finally rest. We owe its publication to the enterprise, perseverance, and unselfish devotion to science, of Jefferson Church, M. D., of Springfield. Dr. Church assisted in the preparation of the manuscript, superintended the printing, and assumed the entire pecuniary responsibility of the undertaking. The work loses much of its value in not being completed according to the original plan. As it is, in its present incomplete form, with its many serious defects, literary and other, it does not do full justice to the author. Its imperfections, however, are all forgotten by him who has the courage to read it, and the capacity to understand it. It is, indeed, a monument to the industry, learning and ability of the writer. Enough may be got out of it to furnish capi-

tal for a score of ordinary authors. It is not calculated to be popular; it is too much a work of principles and classification. But let it be once mastered, and it will richly repay whoever has made it a study. Whether or not the reader yields his assent to all the theoretical and practical views inculcated, he can not but acknowledge the genius of the writer, his profound knowledge of Medicine, and the importance of his labors for its advancement.

Dr. Tully was doubtless the most learned and thoroughly scientific physician of New England. If his equal may be found any where, I am ignorant of the fact. He had a large and costly library, and was a diligent and methodical student through life. His knowledge of Botany was extensive and very accurate. Chemistry, particularly organic and pharmaceutical Chemistry, he understood probably better than any one in this country. He was acquainted with Physiology, and was familiar with the literature of those branches of his profession which he did not practice. Indeed, his studies took a wide range. He knew Latin and Greek well, at least so far as these languages are employed in natural science. And all his knowledge was singularly minute and exact. He assisted Dr. Webster and Prof. Goodrich in the scientific department of their dictionary, furnishing the definitions of the terms of Anatomy, Physiology, Medicine, Botany, and some other branches of natural history. Periodical and other current literature, including works of fiction, received a share of his attention.

Dr. Tully was an able and interesting lecturer. His tall, manly form, broad, square shoulders, large head and prominent eyes, served to fix the attention. He spoke distinctly and without gesticulation, reading from his manuscript in a loud, almost stentorian voice, with an uniform and slightly nasal tone, and assured air. The novelty and boldness of his views; his skillful elaboration; the vigor of his expressions; his merciless criticisms of authors; his sarcasms and denunciations, combined with a positive manner, secured the attention of all. His more enthusiastic pupils thought him the greatest man alive; hung upon his lips trustfully and gratefully, and pronounced all other teaching worthless in comparison. Some of his undiscriminating admirers not only adopted his opinions, but caught the peculiarities of his manner, and even imitated the tones of his voice. The younger students frequently complained that his matter was too scientific and his language too

technical; but these complaints grew less frequent as the course of instruction advanced. His private pupils and chosen disciples were thoroughly trained, and in several instances have become disinguished scholars.

Dr. Tully was an intelligent and discriminating practitioner. He investigated his cases thoroughly, usually arrived at a correct diagnosis, drew inferences cautiously, and grounded his opinions on the facts before him. His unrivaled knowledge of Materia Medica, particularly indigenous Materia Medica, and his familiarity with all the new remedies, especially the new organic compounds, gave him a great advantage in prescription. His resources, in a difficult case were, so far as I know, unparalleled. He was somewhat famous for the treatment of obstinate chronic cases—cases that had worn out the patience of others. Such cases were sometimes put into his hands by attending physicians for his exclusive management. And he not unfrequently succeeded in curing diseases which had defied the skill of the ablest and best practitioners. He was fond of heroic medicines and heroic treatment, and incredulous as to many weak remedies in common use. Alcohol, morphine, quinine, strychnine, veratrum, arsenic and the like, were favorite articles; while he heaped unmeasured abuse upon blood-letting, cathartics, antimony, the alkaline salts, and the antiphlogistic and reducing practice generally. But he was not undiscriminating either in praise or censure. In all cases and in every capacity, he was self-reliant if not self-sufficient, firm in the faith he had himself wrought out, discarding platforms, regardless of authority, and unmindful of clamor. When he had once formed an opinion, he was unyielding, sometimes headstrong, as strong men are apt to be. In his intercourse with his patients, he had a perpendicular way of doing things. His directions must be followed, and friends or nurses must not interfere. He would not stop to argue and explain, paid no attention to the whims and fancies of old women, and quietly took his leave when he thought confidence was wanting. For these reasons, he was not what is known as a popular physician.

In his intercourse with medical men, Dr. Tully was honorable and manly. He would not betray confidence; would not take an unfair advantage of a professional rival. Quackery, whether in or out of the profession, he despised. No doubt he had strong preju-

dices; was censorious and suspicious, possibly jealous. He was dissatisfied with the world; may have been tinged with misanthropy; but no act of meanness or low malice tarnishes his fair name. Most of his business, in the last years of life, was in the way of consultation. He loved to meet his medical friends and discourse on his favorite topics. His conversations were in the style of monologue more than dialogue, and reminded one of his lectures or essays. He talked right on, as though compelled by the overflow of his ideas. Vexatious questions and interruptions annoyed him. In talking, as in writing, he was magisterial, exuberantly, if not ambitiously, learned, discursive and diffuse. He had a critical knowledge of words, and loved them, seemingly, for their own sake. An elongated word was, in his mouth, "sweetness long drawn out." If a man had three christian names and two titles, he would repeat them all. He had not the art of abridgment and condensation. I have heard his wit spoken of, but it seemed to me he had none.—I make these criticisms because they are necessary in giving a full length, truthful portrait of Dr. Tully. Sum up all his imperfections, and deduct them from his merits, and there is enough left to make a man of—a whole man, and (may I not add?) a great man.

Dr. Tully was one of the most indefatigable of men. He was a diligent observer, orderly and systematic in every thing, and never missed an opportunity to replenish his stores of knowledge. He carried in a pocket book, made for the purpose, slips of foolscap paper, (he called them octants,) on which he wrote, at the time, whatever came under his notice. Whether he was reading or visiting a patient, conversing with a friend, riding or walking or sitting, his note book was always at hand. At short intervals, he assorted these notes, each having its running title, and put them away under proper general headings, as materials for his lectures, or for more formal essays. A very large amount of valuable manuscript, thus collected, is in the hands of his executor. He was eminently a matter-of-fact man, took delight in minute investigations; but in all his inquiries, his aim was to illustrate principles and discover general laws. In his mind was combined great love of detail with extraordinary powers of generalization—an unusual combination.

BIOGRAPHICAL NOTICE

OF

GEORGE SEYMOUR, M. D.

BY J. G. BECKWITH, M. D., OF LITCHFIELD.

One of the manifestations of an enlightened age and more refined civilization, is apparent in the erection of monuments to perpetuate the memory of deceased friends and relatives, and particularly to those public benefactors who have dispensed rich blessings in the broad fields of wretchedness and misery which have become the legitimate inheritance of our fallen race. To this latter class belongs the faithful physician whose removal from the earth causes a chasm which can not soon be forgotten or supplied. In his disinterested and self-sacrificing labors, he dispenses blessings with a God-like hand; and when he is removed from the scene of his earthly labors, neither justice toward the departed nor sympathy with the living will permit such an occurrence to pass with so brief a notice as the simple record of his death. Our state and national organizations, with commendable regard to the memory of our deceased professional brethren, have allowed a space in their proceedings to a brief biographical notice of their virtues, and thus leave on their imperishable records suitable monuments to the living character of the departed.

The only member of our county organization who has passed away from our midst during the past year, is Dr. George Seymour, of Litchfield, whose memory will long remain fragrant, and his name be associated with the recollections of personal friendship, and repeated with mingled emotions of gratitude and grief. For his character, that could not be buried in the tomb, will be fondly cherished by survivors for their benefit. We propose to give a few statistics of his life or personal history.

Dr. George Seymour was born in Litchfield, Dec. 27th, 1816. He was the youngest son of Moses Seymour, Jr., who occupied for many years a prominent position in the affairs of the town and county of Litchfield. His mother was the youngest daughter of the late Hon. John Strong, of Addison, Vt. His ancestors were highly respectable, and many of them greatly distinguished in state affairs, not only in this, but in other states; among the number, the Hon. Horatio Seymour, U. S. Senator from Vermont, and Hon. Henry Seymour, Canal Commissioner and father of Ex-Governor Horatio Seymour of New York, were his paternal uncles, and General Samuel Strong and Rev. Moses Strong, both of Vermont, were his maternal uncles.

His father dying when he was only ten years of age, his education and preparation for the great responsibilities of life, devolved on an intelligent and devoted mother.

His pupilage was for the most part passed in the schools and academy in his native village. The latter was then under the superintendence and direction of those pioneers of education, Miss Sarah Pierce and John P. Brace, Esq., in the palmiest days of Litchfield. Here he distinguished himself for correct deportment, good scholarship, and the successful prosecution of the routine of studies usually pursued in such institutions. Having obtained honorable distinction in the graduating class at the Litchfield Academy, he entered the office of his brother-in-law, Dr. Josiah G. Beckwith, of Litchfield, at the age of seventeen. Here he exhibited unusual taste and aptitude for the profession of medicine, and after having secured the usual advantages of the medical institutions of New York, he received the degree of M. D., by recommendation of the Regents of the University of that State. He then removed to Springfield, Mass., where he devoted himself to the practice of surgery in connection with the late distinguished surgeon, Dr. Flint of that city. He then returned to his native town in 1842, and became a colleague with his former preceptor, Dr. Beckwith, where he acquired a reputation as a safe and judicious practitioner which secured him an extensive practice. The frequency with which he was called in consultation with his senior medical brethren, is creditable alike to his honorable, upright and gentlemanly deportment toward them, and the appreciation with which he was held as a wise and judicious counsellor.

For a period of more than twenty years, he had, in season and out of season, regardless of exposure to pestilence and death, despite of storms and tempests, of hunger and midnight darkness, on unbroken roads, by day and night, regardless of pecuniary compensation, sacrificed health and comfort to the arduous duties and self-sacrificing labors of his much-loved profession.

During his temporary residence in Springfield, he made the acquaintance of Miss Sarah Hart, granddaughter of the late Gov. Hart, of Vermont, to whom he was married in 1842, with whom he lived about two years. The grave thus suddenly closed over his dearest earthly joys, and he buried in one common grave his beloved wife and his only son and heir. The bright star of his hopes thus early shrouded in clouds and darkness, and

> "Leaving deposited on the silent shores of memory,
> Images and thoughts that could but live,
> And would not die."

Mrs. Seymour was a lady of superior education and surpassing loveliness, exerting the happiest influence upon all with whom she came in contact. She died all too soon for such a one who leaves so blessed and happy a memory behind her.

The sudden blighting of his expectations of happiness on the very threshold of enjoyment, left a shade of sadness over several years of his life, and he left for a period the scene of his bereavement, and indulged his taste for surgery, and for a time took up his residence in the city of New York, and in order to avail himself of his favorite speciality, he devoted himself to hospital and chemical practice, and to an attendance on the lectures at the several schools.

He possessed a keen eye, delicate touch and firm nerves. With an accurate knowledge of anatomy which enabled him to perform difficult and unusual operations with promptitude and success; and it is not too much to say that he had not in operatic surgery, a superior in this part of the State.

On his return again to Litchfield, he resumed his practice in connection with Dr. Beckwith—continued with him until his death.

Dr. Seymour combined superior skill with great kindness and gentleness of manners, with the winning graces of an amiable and

cheerful disposition and happy temperament, which rendered him a great favorite with his patients.

Dr. Seymour was a Fellow of the Connecticut Medical Society, and member of the American Medical Association, and attended the last annual meeting at New Haven in June last, and enjoyed the liberal hospitalities which were so generously tendered by the city, that he made a memorandum of the happiness of that meeting, in his diary. He was ardently attached to the system of legitimate medicine, and detested system builders and reformers; he held no communion with quackery, its advocates or deluded followers.

Dr. Seymour was not ambitious of political preferment. He never coveted office for its own sake, vanity or ostentation. He for two years represented his town in the General Assembly, and was an active and influential member, and although often solicited, would not accept the place afterwards, or many other proffered nominations.

He was a man of rare and fine intellectual endowments, ardent and disinterested benevolence, and great tenderness of feeling. The child of poverty and wretchedness pleaded not to him in vain; he turned not by "on the other side" when misery and want cast on the highway of a pitiless world, an imploring eye. He was no respecter of persons; he would render the same attention to the wretched outcast on the world's charity that he would to the adopted children of education and refined manners, and often, instead of receiving compensation for services, contributed from his own purse to the relief of their necessities, and always afforded the open purse and warm heart in response to all appeals. No wonder that he was the most popular man in the community; he lived but for his friends and the relief of suffering humanity.

Dr. Seymour was the finished and complete gentleman, and the centre of attraction to a large circle of friends and admirers, to whom his racy wit and spicy repartee, his large fund of anecdote, his genial cheerfulness and sound common sense, of which he possessed an unusual share, made him the "observed of all observers," and made him acceptable to all ranks and conditions of social life.

Above the medium stature, of commanding form, he combined the elegant properties, activity and grace. His appearance was always neat and attractive to people of the most cultivated taste and polished manners, as well as to the inmates of the cottage and the cell.

Conciliating as were his manners, he still maintained a manly independence, uncompromising honesty, and stern integrity. Where principle was involved, he never yielded, and although firm, was never discourteous, and by his consistent and conscientious life, he commanded the admiration of his friends and the respect of his political opponents. No man possessed a juster appreciation of human character than Dr. Seymour. No mask concealed the hypocrite from his piercing eye, nor shrouded the unprincipled pretender from his observation.

His death was attributed to a subtle poison which he contracted at Washington in March, 1857. He was never well after his return, and several times he seemed to be hovering on the confines of the grave, when he would rally again, resume his professional duties and again relapse. With every interval of relief from suffering, his mental cheerfulness broke forth unshadowed, and played about everything as of old. He suffered much and long, and when he witnessed the dark mantle of the grave setting his immutable seal upon his destiny, he was calm and collected.

He contracted a slight cold from exposure on the 25th of January, 1861, which increased his difficulty of respiration, and on the 29th, two days afterwards, he suddenly passed away without pain or suffering to mar the aspect of cheerfulness with which the angel of death bore him away. And when five days afterwards a whole community, deeply sensible of the vacancy which was irremediably made in their midst, and his professional brethren and numerous relatives rendered him the last tribute of deep and unaffected sorrow and regard, his countenance was lovely and unchanged. Thus, in the meridian of life, with his eye undimmed and his step unfaltering, at the head of an honored profession, he left these earthly scenes for that bright world where sorrow nor trouble can neither reach nor molest him. It was well said of him, that a more truehearted, unselfish and accomplished man we can not expect to see again.

"The grave will close o'er those we love,
Yet in our hearts still love remains,
It rises to their home above,
And cold forgetfulness disdains."

BIOGRAPHICAL SKETCH

OF THE LATE

FREDERIC W. SHEPARD, M. D., OF ESSEX.

BY S. W. TURNER, M. D., OF CHESTER.

FREDERIC WILLIAM SHEPARD was born in Plainfield, Conn., March 18, 1812. He was the eldest son of Job and Arubah Shepard, who removed soon after marriage from Saybrook to Plainville, settling on a tract of land long in possession of the family, and known as "Shepard Hill." When the subject of this sketch was twelve years old, his father died of consumption at the age of thirty-nine, leaving a widow with five young children, whom he advised to return to their maternal relatives in Saybrook. This they did, and we find them shortly after living upon the farm, frugal, industrious and independent.

A little incident which occurred at this time, will illustrate the thoughtfulness, kindness of heart, and filial affection, which characterized this son. He was one afternoon at work in the field of a neighbor, who passing that way, found him weeping, and inquired the cause of his grief. He replied that he was thinking how difficult it was for his mother to support the family.

At an early age he manifested a strong desire for knowledge, and his love of study was such as to attract the attention of his venerable pastor, the Rev. Frederic Wm. Hotchkiss, whose heart warmed toward the boy—his namesake. He took him under his special care, instructed him after he had passed beyond the branches taught in the common school, and prepared him, by a good classical education, for the study of medicine, which he commenced with Dr. Samuel Carter of Saybrook. His leisure hours at this period were spent in teaching, in which, displaying the enthusiasm and untiring zeal which marked his subsequent life, he was very successful. In 1831, at the age of nineteen, he attended his first

Course of Lectures at the Medical Institution of Yale College. After three years' study, with three courses of Lectures, he graduated at New Haven in 1834—and we presently find our young Physician, not yet twenty-two years old, settled at Gale's Ferry, in the town of Ledyard, which place he had chosen at the recommendation of Dr. Knight.

Here he succeeded well, but the attractions of a more extensive field, and a practice near his early home, induced him to leave and remove to Essex. His field of practice, for some years after this, was not confined to Essex alone, but extended to the neighboring villages of Saybrook, Winthrop, Deep River and a part of Chester.

After a practice of twenty-five years, in the full vigor of manhood, he was stricken down by Pneumonia, and died, after a sickness of eight days, on the morning of the second of May, 1860, six weeks after his forty-eighth birth-day.

Dr. Shepard was married in 1840 to a daughter of the late Timothy Green, Esq., of East Haddam, Miss Maria T. Green, who survives him, with two daughters and two sons, the youngest only two years old. Dr. Shepard was, in the strictest sense of the term, *an honest man*—frank, open-hearted and sincere. In his daily intercourse with the world, a "Nathaniel, in whom was no guile." He never learned to "bend the supple hinges of the knee, that thrift might follow fawning." His faithfulness in the discharge of his professional duties, his strict integrity, and his sympathizing heart, gained him strong personal friends, and his memory is embalmed in the hearts of many whose physician, counsellor and friend he was, during a period of twenty-five years.

But the crowning glory of his life is to be found in his consistent Christian character. In 1830, at the age of eighteen, he made a public profession of his faith by uniting with the Congregational Church in Old Saybrook. He afterwards connected himself with the Church in Center Brook, of which he was a member at the time of his death.

The large concourse of people which, from his own and the neighboring villages, filled the church at his funeral, testified more strongly than words can do, to the worth of the beloved physician, the upright man, and the sincere Christian, who had gone from their midst, to that world where the inhabitants shall no more say "I am sick."

BIOGRAPHICAL SKETCH

OF

ANSON MOODY, M. D., OF NEW HAVEN.

BY B. H. CATLIN, M. D.*

THAT life is valuable and worthy of our highest admiration, which is occupied in the faithful performance of every known duty, though there may be nothing in its whole course of such marked interest as to secure the universal applause of cotemporaries or the lasting remembrance of succeeding generations.

The country or village Doctor may be eminently useful and highly respected, not only for the faithful performance of all his professional duties, but for his labors in the church and community where he resides, and yet be scarcely known in the wide world outside of the circle in which he moves. The true estimate of character like this is to be found in the grateful hearts of those who are the favored recipients of their kind offices, or more truly and fully in that record made on High which shall be revealed at the Last Day. Judged by this standard, the character of our late friend and associate, Dr. Anson Moody, would, we believe, be placed in an exalted position. He was born in South Hadley, Massachusetts, February 25th, 1792; his father, Daniel Moody, being a respectable citizen of that place.

Dr. Moody graduated at Yale College in 1814, having maintained a highly respectable standing in his class, and sharing its honors. He commenced the study of medicine in his native town, attended Lectures in the Medical Institution of Yale College, and was licensed to practice medicine in the Spring of 1817. He

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* Most of the facts here stated are derived from an address delivered at the funeral of Dr. Moody, by Rev. Edward Strong. Several extensive quotations have been made from the same, which are marked as such.

received the Honorary Degree of M. D. in 1840, upon the recommendation of the Connecticut Medical Society. He entered upon the practice of his profession in Palmer, Massachusetts, immediately after completing his course of study. November 7, 1817, he was married to Miss Clarissa Collins, daughter of Ebenezer Collins. This pleasant union was only sundered by his death. They had four children; one died in infancy; three sons survive; two of them are in the profession of their father; the other a jewelry merchant in Vicksburg, Mississippi.

After a residence of five or six years in Palmer, Dr. Moody removed to Belchertown in the same State, where he continued about the same length of time, and then removed to Ware Village. Here he formed a copartnership with a college classmate and followed the practice of his profession seven or eight years. While here he was urgently solicited to settle in North Haven, Connecticut. "Indeed so strenuous were the citizens of this town in their efforts to induce him to come among them, that twenty responsible men of their number guaranteed him a yearly income from his medical practice of not less than eight hundred dollars." "After much hesitation he determined on this third removal."*

After a residence in North Haven of about fourteen years, he removed to New Haven, where he remained till his death, February 11th, 1855, wanting only fourteen days of being sixty-three years of age. In person, Dr. Moody was about the medium size, erect and well formed, with a remarkable honest and benevolent expression of countenance—one which at once impressed the beholder with a correct estimate of his true character. He was a man of more than ordinary vigor, seldom sick. For a time

"He shared the gratuitous practice of our (Connecticut) Hospital, with five others of our Medical Faculty, each during two months of the year, taking this entire responsibility upon himself. When Dr. Moody was taken sick, he had just finished the service required of him by this arrangement. He left the Hospital and returned home to die. And the fidelity with which he discharged his duties to the sick and suffering poor in that institution, to which many bear a willing testimony, is but in keeping with his whole life, and a fair specimen of it. His labors there have been (were) unusually arduous. About twenty-five patients have (had) been visited by him daily, many of them so sick as to move deeply his sensibilities and seriously task his time, strength and skill.

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* Mr. Strong's Address.

"He devoted to these gratuitous labors the morning of each day for two months, returning home at noon well nigh exhausted. Several of these patients have (had) been suffering from the particular disease which in his case proved fatal, and which appears to have been superinduced by the prolonged overtasking of his energies at the Hospital, superadded to his regular practice. In this respect we shall not be far out of the way to say of him that he fell a martyr to his scrupulous and untiring fidelity in the discharge of his professional, and in this instance, charitable duties. Fit termination of a long career of varied fidelity in every relation and walk of life!*"

An eminent physician of New Haven writes:

"Dr. Moody was a kind-hearted, upright man, always governed by honorable and religious principles; his intercourse with his patients was a continuation of kindness and frankness which insured their esteem and respect. In practice he was prudent and judicious, pursuing the expectant rather than the anticipatory plan of treatment. He conducted his patient, in all ordinary cases of disease, prudently, judiciously and successfully."

The following quotation will show how he was estimated by the community:

"As a physician, Dr. Moody was highly valued and skillful. He was endowed with intellectual and moral qualities, which well fitted him for the duties of his profession, and for success in it. He was eminently cautious, possessed a clear and balanced mind, a sound judgment, and a sympathizing heart. He was too conscientious to try rash experiments, and is believed to have met in his practice beyond an average of success.

"Few entered into the sorrows of the sick with so lively a concern as he. Uniformly it was evident not that a mercenary motive actuated him in his professional calls, but rather a cordial desire to relieve pain and restore the patient.

It is the uniform testimony of those who knew him *longest* and *best*, that he possessed a trustworthy skill along with numerous other qualities which greatly endeared him to his patrons. He was assiduous and faithful, eminently a "*beloved physician.*"

To his rare modesty, therefore, and retiring disposition, as also to his liberality, rather than to any deficiency in professional diligence and merit, is to be attributed, I apprehend, the fact that he failed to accumulate any considerable property. The strong attachment of his patrons to him, as their family physician, was conspicuous in the difficulty with which he tore himself away from North

* Mr. Strong's Address.

Haven, to remove to this city, (New Haven,) and the multiplied calls he had for a long time afterward, to visit professionally those families who could not believe any other physician would do as well.

"In the various communities in which he lived he uniformly commanded the respect of his fellow citizens. He has (had) been a *pillar*, as in the Church, so in society. Notwithstanding great natural timidity, his public spirit prompted him to great activity and usefulness in all matters of public concern. He ever manifested a deep interest in the welfare of the community. He was not a man of a disposition so narrow that even a public education and intercourse with the high-minded, and the grace of God, failed to liberalize it. On the contrary, he minded not his own things, but also the things of others. An educated man, he interested himself appropriately in town affairs, and especially in the cause of Common Schools and Temperance. His public spirit induced him to make pecuniary professional sacrifices that he might be useful to his fellow citizens in these public interests."

Dr. Moody was eminently a conscientious, reliable man, never acting upon one principle at home in the community where his conduct would be observed, and on another among strangers, but was ever the same, in the domestic or social circle, or abroad in the large assemblies of his professional brethren, where temptation might have an influence upon those of weaker principles.

"Few men have been more exemplary in the domestic circle. I might call him, without impropriety, a model husband and father. Equable in temper, affectionate in disposition, strong in his affections, accustomed to enter into the feelings of his children and so to attract their confidence, indulgent towards them, tenderly so in respect to recreations and amusement which he deemed harmless, and immovably firm in prohibiting those he deemed otherwise, he was able at once to command their respect and secure their obedience and affection."*

I should fail to do justice to the memory of our esteemed brother if, even in this professional notice I failed to speak of his christian character which was the crowning endeavor and leading principle of his life.

God grant that we may all so love and so live that we shall be permitted to meet in that upper Temple "not made with hands, eternal in the Heavens."

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* Mr. Strong's Address.

BIOGRAPHICAL SKETCH

OF

REYNOLD WEBB, M. D.

BY JOEL CANFIELD, M. D., OF GUILFORD.

THE late Reynold Webb, M. D., was born in Chester, Conn., January 3d, 1791. He died in Madison, Conn., July 1st, 1856. His parents, Reynold and Catharine Parmelee Webb, were persons of the first respectability, and were most deservedly esteemed by all who knew them. They had nine children, all of whom lived to adult age, and to enjoy a good name.

The subject of this notice was the third, an affectionate and dutiful son, entertaining great respect for his parents to the close of their long life. He lived with his parents during his minority, spending his summers with his father on his farm, and his winters in a district school, until perhaps the age of sixteen, and subsequently in the private school of Rev. Samuel Mills, a clergyman of great excellence, and a teacher of distinguished ability. At the age of twenty-one he decided to try the fortunes of a sailor, his brother Samuel, older than himself, having been successful in that employment. He purchased a work on navigation, and was giving his attention to that subject, when Dr. Richard Ely (a very judicious man and physician, and of much influence,) advised him to abandon the idea of becoming a sailor, and to turn his attention to the study and practice of medicine; assuring him that he had many of the right qualifications for a physician. He soon followed this advice and commenced the study of Latin, under the instruction of Rev. Aaron Hovey, of Essex, preparatory to the study of Medicine. After spending considerable time in this way, and in teaching school, he began the study of his profession with Dr. Richard Ely, and continued with him about one year, when Dr. Ely died.

He finished his term of study in the office of Dr. Samuel Carter, of Saybrook, attending in the time two courses of Lectures in the Medical Institution of Yale College, where he graduated 1819. Soon after his graduation he commenced the practice of medicine in his native place, and in a short time had a fair business and a good reputation. In 1821, there occurred an opening for a Physician in Madison. The Doctor broke away from his friends and business in Chester and vicinity, and located in Madison. Here he did not at first remain long but accepted an invitation from the people of Essex to supply the place of Dr. Dickinson, then too feeble to practice, but at the urgent request of his friends in Madison, returned to that place, where he spent the remainder of his life in the constant practice of his profession, and in the discharge of the duties belonging to the various civil appointments conferred upon him by his fellow-townsmen, as Representative to the State Legislature, Judge of Probate, Justice of the Peace, and others.

During the early part of his residence in Madison, Dr. Webb married Miss Deborah H. Meigs, daughter of Daniel Meigs, Esq., of that place, who survived her husband until some time in the year 1860. They had two children. The eldest, a son, Daniel M. Webb, M. D., the professional successor of his father, and Catharine M. Webb, afterward Mrs. Wilcox, who deceased since the death of her father.

When Dr. Webb located himself in Madison, his reputation as a successful physician, his gentlemanly demeanor and pleasing address, at once introduced him into general favor, and won for him the esteem of the people of his new field.

He soon enjoyed the respect of his new professional neighbors, and his fidelity and success were rewarded by the confidence and liberal patronage of the community.

Dr. Webb was early a member of the New Haven County Medical Society, and was repeatedly its President; was often chosen a Fellow of the Connecticut Medical Society, and was an honored and useful member of our annual Conventions. He was a member of the American Medical Association, and repeatedly attended its meetings as a delegate from the New Haven County Society.

He was a public-spirited man, caring for the general interest and prosperity of the entire community. He was a benevolent man, as many of the various objects of charity, public and private, of his time, could prove, and as the poor who never left his house

uncared for could fully confirm. Dr. Webb never made a public profession of religion, but was a firm believer in the truths of Revelation, and I am assured died in the possession of a Christian hope.

Dr. Webb possessed a strong and vigorous intellect, and although it was imperfectly trained by early education or by subsequent culture, he always gained the esteem and confidence of his professional associates and of the community. The imperfection of his early education was probably owing in part to his limited pecuniary means, and partly to the late period in life when he decided on a professional course; and his lack of subsequent culture is to be accounted for from the almost constant pressure of duties outside of his library. By the exercise of a sound judgment he was able to turn all his acquirements to a practical use. He was eminently an observing man, watching carefully and diligently the diseases which came under his notice, he became familiar with all their features, readily recognizing their peculiarities and foreseeing the changes which would probably take place in their progress.

Hence, he rarely erred in the diagnosis and prognosis of diseases. The opinions which he formed of the cases under his care, he readily communicated to his patients and their friends, so frankly and kindly as to gain esteem and secure confidence. In obscure and doubtful cases, his doubts were expressed, that farther advice might be obtained if desired. His intercourse with his patients was marked by kindness, gentleness and self-possession, and with entire frankness and integrity. The Dr. was peculiarly a practical man. In his practice he was guided by strong common-sense, enlightened by careful observation and preserved from error by a judgment unbiased by irregular impulses or fanciful theories. He examined diseases with careful deliberation and keen discrimination, and usually formed a correct opinion of their character and tendencies. He was perhaps better qualified to carry out established methods of practice than to devise such as were new. The character of his practice was rather watchfully expectant than anticipating. Still he was observant of the changes which arise in the progress of diseases, and ready to meet them by prompt medication. He was not prone to adopt new methods of treatment, nor to employ the multitude of new remedies which are continually brought before the notice of the profession, preferring such as had become familiar to him by long continued use. He did not believe

that a doubtful remedy is better than none, but chose to trust to the resources of nature rather than to employ medicines, especially such as were active in their operation, the beneficial effects of which he could not fairly foresee.

At the same time he was ready to employ prompt and active medication when such treatment commended itself to his judgment, or had been approved by experience.

Much of the success of Dr. Webb as a physician depended upon the entire confidence reposed in him by his patients. He was naturally cheerful and hopeful, and he well knew how to dispel despondency, and to excite not only a desire but a will to recover, in the minds of his patients. This was done by no labored disquisition on the nature of the disease or the progress of the symptoms, but by a few words of confident hope, honestly spoken and implicitly believed. No one doubted the truthfulness, or for the most part the accuracy, of the opinions which he formed and always freely expressed.

In the latter part of his life, Dr. Webb was much employed in consultation by neighboring physicians. He was my principal counsellor in cases of difficulty occurring in my practice for nearly a third of a century, and I remember with gratitude and esteem, the kind, candid and honorable manner in which he uniformly treated me in our professional and social intercourse.

For the duties of a consulting physician he was well qualified. A long and enlightened experience, carefully gathered and remembered, enabled him to bring large resources to bear upon the cases which were presented to him, while his frank integrity insured him the confidence of the attending physician as well as of the patients and their friends.

Doctor Webb was not greedy of gain nor of applause. He was satisfied with the rewards of a life of labor devoted to the heroic and diligent performance of his professional duties, and he was well aware that the unsought reputation which will always follow such a performance of the duties of any station in life, is of more value and affords more satisfaction than any amount of popular applause unduly sought or unworthily obtained. This reputation he enjoyed for many years, and when in the vigor of manhood he was removed by death, a large community mourned the loss of an honest and skillful physician, of a safe and judicious counselor, and of a kind-hearted, benevolent and public-spirited citizen.

BIOGRAPHICAL NOTICE

OF

WM. S. PIERSON, M. D., OF WINDSOR.

BY A. MORRISON, M. D.

It may not be inappropriate that I give, as an introductory to the biography of Dr. Wm. S. Pierson, a short account of the men who practiced medicine and surgery in the town of Windsor, from its earliest settlement down to the time of Dr. Pierson's arrival in said town.

First in order, we mention the Rev. Ephraim Huit, who came from the west of England to America in the year 1634. At first, to Massachusetts Bay, thence, after five years, to the plantation of Windsor, where he arrived in 1639, and became the colleague of the venerable Warham in the care of the Church. The inscription on Huit's monument shows that he died in 1644, much lamented by the inhabitants of the plantation and colony.

We are told in the history of ancient Windsor, that Mr. Huit was a gentleman and a scholar, having come of gentle blood and been trained in the best schools of England. The monument of Huit is the oldest in our town, county and state, and probably the oldest in the whole valley of the Connecticut river. It still bears marks of skill and taste in its mechanical execution, and the literature of his epitaph is equal to the best of its date.

We are also told that Mr. Huit was somewhat taught in medical lore, and skilled in the application of remedies. Certain it is that he was frequently consulted "in ye affairs of medicine as well as in ye Ecclesiastical and Publick affairs," and in speaking of the physicians of our town we ought not to neglect so bright an example in medicine as the Rev *Doct.* Huit.

The tombstone of Huit is surrounded by the graves of the common people, marked by slabs of freestone, apparently rough from the quarry, with a few sentences graved upon them, showing who lies beneath, telling when and where they were born, when and where they died, and perhaps recording some important events of their lives in quaint rhyme.

> "Yes, e'en these bones from insult to protect,
> Some frail memorial still erected nigh,
> With uncouth rhyme and shapeless sculpture decked,
> Implores the passing tribute of a sigh."

> "Their name, their years, spelt by the unlettered muse,
> The place of fame and ELEGY supply;
> And many a holy text around she strews,
> That teach the rustic moralist to die."

Pardon this digression, and I will proceed to the next in order of Physicians in Windsor.

If we except Warham, Maverick and Huit, (pastors and teachers in the church, of whom I conjecture all practiced medicine to some extent, though we have no written account of either having done so, save Huit, as mentioned before,) the first regularly educated and licensed physician in Windsor was Doct. Bray Rositer. The date of his arrival in Windsor I can not learn, but he died in 1672. It appears that he lived and practiced a while in Guilford, Conn. It is reported of him, that he was a well educated gentleman, skilled in the practice of medicine and surgery, and also rendered distinguished service in public affairs. He made the first post-mortem examination in the colony of Connecticut, for which he received pay out of the public treasury.

Next to Rositer, in Windsor, in 1654, came one Daniel Porter, who was examined by the pastors and teachers of the different churches of the Connecticut Colony, and allowed "to exercise his art of surgery." Little is said of him.

Following Porter, one Robert Howard is mentioned as a physician in 1661. It appears that he practiced nearly up to the date of his death, which was about the year 1684.

Next in order was Doct. Samuel Mather, a graduate of Harvard College in 1698. He commenced practice in Windsor in 1702, and continued through forty-three years. It is written of him that he was eminent in civil and military life, as well as in the practice of medicine.

Fifth in the line, came Doct. Alexander Wolcott, who graduated at Yale College in 1731, and soon after commenced the study of medicine under Doct. Norman Morrison, of Hartford. Having finished his course of medical study, he commenced the practice of medicine and surgery in his native town, about the year 1740, and soon attained a distinguished rank in his profession. He served with ability as surgeon at the capture of Louisburg in 1745. Returning to his native town, he re-entered upon the duties of his profession, and continued to practice till 1776, when he was by appointment placed at the head of the Examining Committee for Surgeons and Surgeon's Mates in the Continental army.

The records of Windsor show that Doct. Wolcott was a firm friend to the American cause during the Revolutionary struggle, and always active, both in public and private, to promote its success. He died, full of years and honors, in 1795, and was succeeded by his son, Doct. Christopher Wolcott.

About the commencement of the Revolution, the field for medical practice, in Windsor, was considered sufficient for two men, and cotemporary with Dr. Alexander Wolcott lived Dr. Timothy Mather, a Christian gentleman and a skillful physician. He died, much lamented, in the year 1788, at the early age of thirty-four years. Both Wolcott and Mather were men of mark. Both were men of letters, both were men of fine presence and polished manners, both were well taught in medicine, both lived highly honored, and died universally lamented.

Soon after the date of Doct. Mather's death, I conjecture, that Doct. Hezekiah Chaffee came to Windsor, and set up the practice of medicine. And it was about this time, too, or a little after, that Doct. Alexander Wolcott admitted as a partner in his practice, his son, Dr. Christopher Wolcott. These men—Chaffee and Wolcott, Jr.—held the field for many years. They are remembered and often spoken of by the elder portion of the inhabitants of Windsor to this day, and many there are who lament the change that has taken place in the practice of medicine since the palmy days of Chaffee and Wolcott.

Though it is reported of them that they did not always live as men of the same profession should live—in unity and friendship—still we have every reason to believe that they were both skillful physicians and worthy men. Chaffee died in 1818, at the age of

eighty-eight, and Wolcott in the year 1821, at the age of sixty-seven.

Doct. Chaffee had for a partner in practice, during the latter years of his life, his son, Doct. Hezekiah Chaffee, Jr., a well-taught, active and faithful physician, who survived his father only three years, dying in the year 1821, at the age of fifty-nine.

Doct. Christopher Wolcott had given up the active duties of his profession for a few years before his death, and his field had been occupied by Doct. Abel Simmons, who came from Ashford, Conn., about the year 1812, and died in 1818. It was said of him that he was a physician of great promise.

To go back a little, it appears that Doct. Elisha N. Sill came from Lyme, Conn., to Windsor, about the close of the last century, and settled with a view to practice medicine, but being elected to several important and lucrative offices in the town, and the still more important event of *marrying a rich wife*, added to the above cause, he partially abandoned practice, and gave the most of his time to public affairs and the care of his large estate.

Thus I have related, in brief, the little that I have read and heard concerning the physicians of Windsor prior to the year 1818, not including those who practiced in East Windsor, South Windsor, and Ellington, on the east side of Connecticut river, Bloomfield, Windsor Locks, and the Society of Poquonock, on the west of Connecticut river, which towns and society were all originally included within the boundaries of Windsor. Those men who practiced medicine and lived within or near the boundaries of the ancient Palisado in Windsor proper, may be said to be predecessors of Doct. Pierson, and I have therefore confined myself exclusively to them. It would be interesting to write out in detail—if material could be found—the lives of these truly eminent and worthy men, but this work must be done, if done at all, by a man of more leisure and more information than I possess, and holds a readier pen than mine.

We have come down to the year 1818, the date of Doct. Simmons' death, and also the date of Doct. Pierson's arrival in Windsor. Here let us commence the biography of Pierson.

During my first year in Windsor, while "*waiting for practice*," I made frequent visits to the ancient burying ground, and in tracing out the different inscriptions on the numerous head-stones and

monuments, I particularly noticed one on a plain shaft of free-stone, that read thus:

"Rev. Abraham Pierson emigrated from Yorkshire, England, to New England, in the year 1640, and died at Newark, New Jersey, Aug. 9th, 1668."

"Rev. Abraham Pierson died at Killingworth, Ct., March 5th, 1707, aged 61 years."

"Abraham Pierson, Esq., died at Killingworth, Ct., January 8th, 1752, aged 72 years."

"Dea. Dodo Pierson died at Killingworth, Ct., January 19th, 1796, aged 72 years."

"Dea. Abraham Pierson died at Killingworth, Ct., May 11th, 1823, aged 67 years."

A few days since I again visited the burying ground, and read in addition to the above, as follows:

"Doct. Wm. Seward Pierson, died at Windsor, Ct., July 16th, 1860, aged 73 years."

Here we have the genealogy of the Pierson family through six generations; Doct. Wm. S. being the sixth in the line in this country, from England.

Through the politeness of the Rev. Samuel H. Allen of Windsor Locks, I obtained a more extended account of the Pierson family than from any other source. From this it appears that the Rev. Abraham Pierson, from England, was pastor at South Hampton, L. I., at Branford, Ct., and at Newark, New Jersey, where he died as mentioned above. He is spoken of as a faithful pastor and an excellent divine.

Rev. Abraham Pierson, 2d, was graduated at Harvard College. Pastor at Killingworth, Ct., and first President of Yale College, or Rector, as that officer was then called.

Abraham Pierson, Esq., (third in the line) was distinguished for the services he rendered as a public officer, and his many private virtues.

Dea. Dodo Pierson was, as his title indicates, an officer in the church.

Dea. Abraham Pierson, father of the subject of this memoir, was for many years, a Judge of the Court in the county of New Haven, and an officer in the church of his ancestors, at Killingworth.

Thus we see, and it may not be out of place to mention, that Doct.

William S. Pierson was descended through a long line of distinguished ancestry on the paternal side, and had advantages beyond most men, in this respect. I think I have heard Doct. Pierson say, (and the circumstance is not a little remarkable,) that one member of each of the six generations of the Pierson family in America, had graduated at an American college, five in an unbroken succession at Yale.

On the maternal side, Dr. Pierson was descended through his grandmother, Mary Seward, from

1st. William Seward, of Bristol, England, who settled in Guilford, and died at the age of ninety-six.

2d. Capt. John Seward.

3d. Dea. Wm. Seward, father of Mary Seward, who married Dodo Pierson.

We have now come down to Doct. William Pierson, who was the son of Abraham Pierson, Esq., and Lydia Redfield. He was born on the 17th of November, 1787, at North Killingworth, Ct. Here, strictly speaking, we begin his biography.

Of the childhood of Doct. Pierson, we know little; of his boyhood, we learn that he fitted for college under the tuition of the Rev. Doct. Elliott, of Guilford, and entered Yale at the age of seventeen, where he graduated in the year 1808. For two years subsequent to his graduation, he was engaged in teaching at Springfield, Mass. At the end of this period, his health failed, and he returned to Killingworth, where, after some months of rest and short journeyings, he was so far restored as to be able to commence a course of medical studies. After a short time, he repaired to Dartmouth College, then distinguished by the services of Doct. Nathan Smith. Under this eminent and truly great man, in medicine, young Pierson pursued the study of medicine, receiving his private as well as his public instruction, an advantage which many a student of the present day might well covet. In the month of August, 1813, he received the degree of M. D. from Dartmouth, with only three other members of his class. There were many others belonging to the same class, but they received only a license to practice medicine, not being able to stand the rigid examination required for the degree of M. D.

The *now* Doct. Pierson returned to his native parish of Killing-

worth, and immediately commenced the practice of medicine. Here his professional life began.

In the following April, he removed to Durham by invitation of the people of that town, their only physician having died a short time previously.

In the month of May, subsequent to his arrival in Durham, he married Miss Nancy Sargent, daughter of Capt. Jacob Sargent, of Hartford.

In Durham, Dr. Pierson lived four years, and obtained an extensive practice. He had now arrived at an age when a man can, if ever, meet the *hardships* of the profession and accomplish a great deal of work, and perhaps no man ever entered with more alacrity into the field of medical practice than did Doct. Peirson.

In 1818, the date of Doct. Simmons' death, as mentioned before, Doct. Pierson removed to Windsor, where he spent the remainder of his life, forty-two years.

At the date of Dr. Pierson's arrival in Windsor, it was considered one of the best fields for medical practice in Connecticut, and worthy of the ambition of the first men in the profession. It was customary in those days, whenever the people of a town needed a physician, to extend a formal invitation to one whom they thought fitted for the place; and it was in this way that Dr. Pierson came to Windsor. He has often told me that there was a time when his practice was second to no country practice in the State. He continued to work with unabated energy through the long period of eighteen years, when a painful and protracted illness forced him from the field of his labors and though subsequently, in a measure, restored, his weakened frame and frequently returning attacks of disease, never permitted him to re-enter practice to any considerable extent.

Dr. Pierson was singularly happy in his family relations, and strongly attached to his home which was always the abode of cheerfulness and plenty. His wife, an estimable woman, was every way fitted for her position, and perhaps contributed as much to her husband's success, by her industry, tact and good sense, as did he himself.

From the best sources of information, and from my acquaintance with the man, I add in the way of characterization, that

Dr. Pierson in boyhood was a pleasant, active lad, ardently

attached to his home and friends, fond of the sports and recreations common to the young, thorough in whatever he undertook, he was equally willing to study or work with his hands.

As a man, he was distinguished by remarkably tender sensibilities, strongly attached to his family, always social with his neighbors, and not envious of the prosperity of any, he was just to all. To these qualities were added ready tact, excellent judgment, strength of purpose, strict integrity, and an instinctive shrinking from all pretense and assumption. His whole life was a unit in these respects, I think.

When his health permitted, he excelled any man for industry I ever knew. As a manager of a farm, he had not his superior in Windsor; and in the prime of life, with the scythe, hoe, or reaping-hook, he feared few competitors. Many a farmer in Windsor will attest to this.

A good salesman of the products of his farm, an exact accountant, a close collector of all who were able to pay, and an excellent economist of his means, he became rich as the term goes in the country; but if ever a man earned his wealth well and honestly, it was Dr. Pierson.

He had his failings, (who has not?) but his good qualities greatly preponderated. Always genial and social at his fireside and table, his house was the resort of a large circle of friends, whose society was his delight, whenever an hour could be spared from the duties of his profession or the business of the farm. The poor never went hungry from his door, nor the rich to despise the parsimony of his entertainment.

As a physician, Dr. Pierson was untiring in his attentions to his patients, a close observer of symptoms, and a ready prescriber of articles of the Materia Medica. He was never distinguished for heroic practice, trusting more to the recuperative energies of nature, than many physicians of less knowledge, but more boldness. This did not arise from a want of confidence in remedies, but he had an aversion to overdosing, and consequently his remedies were few and simple, and he strove to have those few well adapted to the exigency of the case under treatment.

In "Theory and Practice" he was particularly distinguished in the department of Obstetrics. His accurate knowledge of the Anatomy of the parts concerned in parturition, his peculiar tact,

as a manipulator, and his unrivaled experience, united to his happy faculty of inspiring his patients with confidence in his ability to deliver them safely, rendered him justly celebrated in this important department of medicine. Let us

> "No farther seek his merits to disclose,
> Nor draw his frailties from their dread abode;
> There they alike in trembling hope repose,
> The bosom of his Father and his God."

In company with Dr. Wilson of Windsor, and in consultation with Drs. Knight of New Haven and Hawley of Hartford, I attended Dr. Pierson during his last illness, which was of a week's duration. On the 8th of July, 1860, he was seized violently with a spasmodic affection of the urethra, which rendered the introduction of a catheter necessary for the passage of urine. This was done with not more than ordinary difficulty on the second day, I think; on the fourth day, violent inflammation of the whole urinary organs succeeded, and he gradually sunk with the usual symptoms of that disease, till the 16th of July, when he breathed his last.

Three days after, his funeral was attended by the members of his family, by many of his medical brethren in the surrounding towns, and a large concourse of neighbors and friends, who came to pay their respects to the memory of the man whom in life they had known and loved.

ARTICLE VI.

MEDICAL PROGRESS,

Being the Annual Address delivered before the Convention, May 29th, 1861.

BY JOSIAH G. BECKWITH, M.D., OF LITCHFIELD,

President of the Society.

GENTLEMEN:

Another year has been added to the corporate existence of the Connecticut State Medical Society, and we, its Members and Fellows, have again convened in accordance with established usage and in obedience to our By-Laws, as counselors and legislators on the important interests committed to our trust.

I congratulate the Convention that notwithstanding nearly one-tenth of our profession in this State has been exposed during the past year to the casualties of war, that our ranks are yet comparatively unbroken; and that our lot has been cast in this highly favored portion of the earth, and in an age encircled with a halo of glory unprecedented in the history of our race.

The past year has been one of startling and momentous events. We have witnessed the progress of a civil war the most gigantic that the world has ever seen; periling the existence of a government conceded to be the last refuge for oppressed humanity, the last asylum of liberty and the last trial of that great experiment whether a Republican government can be sustained. In this mighty struggle for the supremacy between constitutional law and order on the part of the loyal States of the North, and the independence of the Southern Confederacy by the South, we have witnessed vast armies, such as modern times have never known, composing more than a million of men under able Generals meeting in the fields of battle and exhibiting deeds of valor unsurpassed in the annals of warfare. The fair fields of our country have been reddened with the

mingled streams of loyal and disloyal blood, and have been converted into charnel houses of death. We have seen exhibited in this great conflict, the inventive genius, the indomitable will and the inexhaustable resources of the American people. Ordnance of enormous calibre, projectiles of novel construction and terrific power, invincible iron-clad vessels, mortar fleets that have demolished granite fortifications, so constructed as to set at defiance the navies of the world, have sprung into existence at the call of this mighty nation. A new era has been inaugurated in the mode of attack and defense, the nations of the old world have suspended their labors on coast defenses and vessels of war, and are watching in suspense the operations of these new creations which they know must revolutionize the forces now in existence and transfer the balance of naval power to the Great Republic. This year has witnessed the transformation of a peaceful people, devoting their energies to the cultivation of the soil, to manufactures and commerce, into the greatest military power on the earth; the pursuits of husbandry have been interrupted by the march of great armies, and the hum of the wheel and the smoke of the furnace have been lost in the roar of artillery and the cloud of battle. But we have reason to believe that the days of this rebellion are nearly numbered—that soon the old flag of the Union will be again unfurled by common consent over our whole country, and the North and the South again dwell together in harmonious brotherhood under the protection of our unimpaired Constitution. And we shall rejoice to find the American Medical Association again resuming its annual convention and bringing together the collective wisdom and experience of the profession in the promotion of the important objects of its organization. But it was not my object to dwell at length on a subject so uncongenial to our tastes and feelings, so disastrous to our national prosperity and happiness as the present terrible condition of our country, but to bring before the Convention matters more interesting and profitable for our consideration. Perhaps no subject can be with more propriety considered by us, than *the duties of our profession to society, the benefits derived from its exercise, and the duty of legislators to provide for the necessities of the public by extending the educational requirements of the profession of legitimate medicine.*

It would at first appear surprising that a profession which has exerted so controlling an influence on the happiness and destiny of the

world, should be so inadequately appreciated. And this fact can only be accounted for, by the nature of the profession and the relations it sustains to the public. In its nature it is retiring, and labors amidst scenes of misery and suffering, quietly discharging its duties and only found in public mingling with the masses when its attention is directed to some great work of benevolence or of general utility. It is consulted by legislators, when wise and seasonable advice is required for the public health, or when provision is to be made against the ravages of some fearful epidemic disease, but when the occasion which called it forth no longer requires its presence and influence it retires from the public eye, while its labors are forgotten amid abundant evidences of its power and while living monuments attest the potency of its influence. The profession has a moral dignity, elevation and grandeur peculiar to itself,—for *man* is the subject of its ministrations—no matter how degraded the individual, though cast off by kindred and friends and left to suffer on the highways of life, the faithful physician recognizes even in his degradation the claims of a fellow traveler, and like the good Samaritan he passes not by on the other side when darkness and despair are closing around him. All ranks have a claim on his services from the very threshold of existence; with sleepless vigilance he watches and defends to the last extremity the citadel of life when the angel of death threatens the slumbers of the infant, the high noon of manhood and the evening of declining age. And when his skill can no longer ward off the decree of the Almighty, then only, he resigns his patient to the inevitable hand of destiny, to be gathered to the successive generations that repose beneath the surface of the earth. The world listens with indifference to the recital of thousands slain on the battle-field or swept away by other devastations in the course of human events; it is only when disease threatens the lives of our kindred or enters the family circle, that we feel the presence of the great destroyer and eternity seems no longer lost in the illusive hues of distance. Then it is that the physician seems clothed with superhuman agency and is regarded as standing between the issues of life and death, and the utterances of his lips are listened to with eager attention. All ranks and conditions of life are on one platform before him; virtues and vices are alike revealed to his observing eye; moral deformities and vicious manifestations are unmasked, but only to be buried in oblivion. How important, that a profession which holds the unre-

vealed character of men in its keeping, should be worthy of the trust committed to its care.

It may be well now to briefly glance at the history of our time honored profession. Originating in the dark era of ignorance and superstition, it has ever been the chosen and only legitimate repository of the medical experience and learning of the ages that have rolled away. Such names of its early founders as have come down to us, are conspicuously inscribed on the pillars of our medical temples. Our system in its broad and magnificent proportions, stands like an eternal pyramid commanding the respect and admiration of the world; while other systems are, in comparison, rush-like fabrics which children raise in the sand for their amusement. Superstition, for ages, regarded it sacrilege to disturb the bodies of the dead to learn wisdom from the examination and dissection of the human frame after the mysterious fire of its existence had been extinguished. But scientific research has revealed the fact that the utmost care cannot preserve unimpaired this beautiful structure which we adorn with so much care, but it must return to the dust from which it was taken and be trodden beneath our feet and wafted by the winds to contribute to new creations in the economy of nature. Christianity discloses the higher truth that man has a nobler destiny than this earth; that annihilation exists only in the atheists brain, and that while there are a thousand avenues from life, there is not one from existence. Superstition no longer guards the sepulchral gate, but the wonderful structure of the human body is yielded for the advancement of science and human improvement. Anatomy has unfolded its rich treasures and the surgeon has been furnished with the information by which he has been enabled to perform the most difficult operations. In military surgery how great are the obligations of humanity to the profession; the battle field has been made the theatre of its triumphs; new laurels have been added to its skill, amidst the shock of contending armies, and the carnage of war has been deprived of many of its horrors by the self-sacrificing ministrations of army surgeons. But war with its casualties has been a most valuable school for surgery, and that branch of our profession is now gathering most valuable experience from the number and endless variety of cases submitted to its skill. In our own country this was particularly the case in the war of the Revo-

lution, which gave a great impetus to the profession and led to many novel and valuable plans of operation and introduced many improvements in surgical instruments and appliances. Before this era, surgery was comparatively in its infancy in this country, and it is an interesting fact that may not be generally known, that the first dissection of a human subject by a physician in this country, was made in New York in the year 1750, by Drs. Bard and Middleton on the body of Hermann Carroll, executed for murder. After the termination of the war, Medical Schools and the department of surgery were infused with new life, and several valuable works were given to the profession embodying the results of recent experience. After this time, the profession and Medical schools steadily advanced and gathered new acquirements during the war of 1812. But the profession has made more progress during the past half century than for many centuries of its previous existence and has fully kept pace with the astonishing progress of the natural sciences and the great strides taken in the march of human progress, which is fitly illustrated by the changes that have taken place in our own country during this eventful period. The glorious mountains, the broad rivers and immense prairies—the great features of our physical geography, remain unchanged. But the rivers which flowed through vast solitudes unbroken by the voice of civilization, are now whitened by the sails of commerce proceeding from the great cities which have sprung into existence on their banks; during this period the genius of Fulton has introduced a new agent which has revolutionized the civilized world. Men formerly moved on water as the wind gave them permission, and on land, by the slow power of animals. So recent has been the introduction of this great power that I recollect distinctly where, in 1807, the first steamboat was launched in my native town on the waters of the noble Hudson. The genius of Fulton, assisted by the liberal-minded Livingston, made the great experiment. In the application of this great agency to the printing press, to railroads and to all the great manufacturing interests, it has introduced an era so prolific in results that I need only allude to them to bring in review before you their inestimable value to mankind. Corresponding discoveries have been made in Chemistry, Botany and Materia Medica; extensive fields have been explored and investigated in these departments by Brande, Hare, Silliman and others, adding largely to the

usefulness of the profession. During this period, Medical schools and Medical organizations in the several States of the Union have come into existence; improved text-books on medicine, and the collateral sciences have been published and added to our libraries, while the periodical press has been constantly sending forth new facts and discoveries. Thus armed, the profession has become almost invincible in the treatment of diseases which in former times were imperfectly understood. The investigations of science are to the educated physician like the light from heaven, cheering and guiding him in his labors. Our ancestors knew the importance of education, hence they laid the foundations of our colleges with their own habitations, knowing that the destiny of the infant colonies depended upon the education of the people—that literary and scientific institutions like the larger arteries imparted through their minute ramifications their life giving influences—that without them progress in all the departments of life would be arrested. The arts and sciences are intimately connected, for they promote each other. How important is art to mankind; the name itself conveys to the mind which comprehends it the noblest achievements of men and the brightest displays of human genius; more humble than science it is not less important; to it we are indebted for the pleasures of our tables, the comfort and beauty of our wardrobes, the cultivation of our fields, the lightning speed with which we move over the land and the ocean—in short, all the conveniences, luxuries and pleasures of polished life are dependent on the arts, assisted by science. We see the application of principles established by the Creator of the universe to produce some definite and desired result for the benefit of his creatures. The natural sciences are a part of our professional studies—they produce a powerful moral and intellectual effect; in them we see the mighty operations of the Infinite; we glance at His perfections and are stimulated to new discoveries on the broad fields of His creation.

For the benefits which the arts and sciences have conferred upon mankind we are mainly indebted to the Medical profession, for it is only a short period of time since these theories were confined mostly to Medical schools; they are now introduced into our colleges and universities. In the investigation of natural science, new discoveries are constantly being made. In 1820 electro-magnetism was discov-

ered. New developments were subsequently made by Ampère, Sir Humphry Davy and Professor Henry of the Smithsonian Institute, but the application of the electric fluid to the telegraph is due to our countryman, Professor Morse. This same element which has sometimes been so destructive to life, has been bound by a hempen cord and brought by science from the skies and made subservient to our convenience—bringing the ends of the earth into instantaneous communication and bringing at this time the detachments of the Federal army, scattered over a wide extent of territory, into the presence of the War Department. Scientific researches led to the discovery of the daguerreotype and electrotype (the ambrotype and photograph being modifications of the daguerreian principle) making the impression of light on prepared surfaces the most natural and correct painter. Before the discovery of chlorine gas by Scheele, England is said to have sent her linen manufactures to Holland to be bleached where grass and sunshine were cheap. And at Lowell, Massachusetts, two hundred cows were kept to fix colors on calico before Dr. Dana discovered a cheap chemical substitute. The investigations which have advanced the noble profession of agriculture by the analysis of soils, the properties of various fertilizers, the discoveries in entomology, have added immensely to the wealth of nations and to the comfort of millions of teeming population. Correspondingly has the medical profession been enriched by the researches and discoveries of those who have devoted themselves to its interests; by comparing the present status of medicine with the primitive, we see something of what has been wrought, and moreover "that while an enlightened practice of the healing art is like the brazen serpent lifted up among the expiring Israelites, ignorance and rashness, which always exist in partnership, are like the flying serpent, let loose to sting and destroy." These vital interests in a community can only be entrusted to men of enlightened minds, experienced by reading, disciplined by study and conversant with the laws of the animal economy.

Distinguished men of all professions have expressed similar sentiments, and in proportion as the profession is thoroughly educated and instructed are the vital interests of society promoted and the duration of human life increased. An erroneous impression seems to exist in every community in relation to the duration of life at the present time as compared with longevity in the generations of our

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have room only for a few statistics, compi-
bles. In the vital statistics of Europe, we
r part of the 16th century, the average du-
eighteen years—one half of the population
twelve years; at the last report, one half ex-
seven-tenths years, making the increase of lon-
in the 16th century, to forty-three and seven-
We observe that in the city of London a cen-
per cent. of the children died before attaining
he per cent. is now only 30 to 35, making in a
undred thousand souls, a saving of one hundred
ually. In the city of Geneva, in the 16th century,
e. died annually, now, one in forty-six. In the
penal convicts from Great Britain, on a change of
h the remuneration for the passage depended on the
instead of the number of passengers, the number of
minished from 50 to 60 per cent. to 1¼ per cent. These
s in mortality have been effected by sanitary improve-
illustrates the value of sanitary science, which forms a
reat system of medicine and with which it is intimately
nd which requires a thorough knowledge of the science
the laws of physiology, treatment of diseases, change of
l other influences on the human body, and all the laws
ate the prevalence of epidemics. These are facts which
ician should understand in order that he may prove a faith-
an of the public health. We will give a few illustrations:
. Hamilton, (now a Brigade Surgeon in the Federal army,)
history of an attack of cholera in the city of Buffalo in
healthy locality in 1852, resulting in the death of nine
the distance of two or three squares, in the course of a
ttributable to upturning the soil in digging for a water pipe—
e danger of disturbing the soil in cities in certain tempera-
s is a single instance of the many which have occurred
ar causes. Attention to the laws of sanitary science it is
ved Holland from the ravages of cholera. You are aware

that when the cholera visited the city of Montreal in 1832, the Common Council of the city of Albany commissioned a distinguished member of our society, now residing in New Haven, to visit Montreal and make a thorough investigation of the nature, causes, treatment and prevention of that new and terrible scourge then let loose for the first time upon this continent. To his able and lucid report we are probably indebted to that preparation for its reception which in many of our cities deprived it of so much of its violence. Our books are full of illustrations of the practical value of this science, which is more apparent in the statistical tables of mortality in prisons and hospitals, than in the country. We are informed that when that distinguished philanthropist John Howard, who goes down to posterity as one of the greatest benefactors of mankind, visited the prisons of Europe, to such an extent did filth, destitution, disease and overcrowding exist at that time, and all previous times, that a common prison was generally regarded as the portal to the tomb. In 1577, at the black assizes in London, Lord Chief Bacon, the sheriff, some jurors and three hundred of the spectators died from the effects of the miasmata of the prison. Howard, with the assistance of our profession, by his indomitable perseverance forced these facts upon the public attention and demonstrated the means of remedying the evil. As the result, jail fever is now scarcely heard of where sanitary laws are enforced. M. Villarme shows the diminution of mortality in the prisons of France by attention to sanitary laws; from 1806 to 1826, the diminution was from one, in nineteen, to one, in forty-three. The comparative mortality of a course of years in the prisons of New York, Sing Sing, Auburn, Charlestown and Wethersfield is worthy of notice. From 1797 to 1823, six hundred and twenty-one died in New York States prison, while two hundred and forty-five died in Auburn, both having nearly the same number of convicts. In Sing Sing, N. Y., from 1849 to 1860, there was an average of eight hundred and eighty convicts, among whom the whole number of deaths was less than two per cent. There are two systems of prison discipline—the solitary or Philadelphia, and the Auburn or congregate; the first contemplates the entire seclusion of the convict—in some cases not a ray of sunshine entering his cell. The other separates them at night and at meal times, only. The location of our own State prison is unfavorable to health, owing,

probably, to the dampness and constant exhalation of vapor which condenses upon the walls of the building; and we find, as we should anticipate, a great prevalence of rheumatism and phthisis, and more deaths resulting from the latter cause than from any other single disease. The mortalities of the prisons of Sing Sing and Charlestown have been given above; they are less than two per cent. In Wethersfield, four thousand three hundred and forty-seven convicts were admitted from 1839 to 1862; number of deaths, one hundred and sixty-one, making the per centage 3¾, besides a large number who were discharged for no other reason than that they might die among their friends. Hence we see that the mortality is two per cent. greater than in other prisons where the same system is pursued —or eighty lives in 23 years; had those men been executed on the gallows, instead of being sacrificed to disease originating in the neglect of the settled laws of health, how would the public sensibilities have been shocked at this enormous waste of human life. Whether under-draining the foundations of the prison would correct this great destruction of human life, is a question worthy of attention. Humanity demands its investigation. Intelligent physicians are competent to advise the community on all matters appertaining to health, eating, sleeping, exercise, clothing, food of all kinds, the habits of the individual, the use of stimulants, ventilation, removing the sources of disease (on all of which matters of exposure the public are profoundly ignorant) as well as the fact that a particle of decayed animal matter no larger than can be held on the point of a needle, will, when inserted beneath the skin, produce death in a few hours. What has been briefly alluded to should be sufficient to induce the public to demand, in the name of humanity and Christianity, the interposition of the laws of sanitary science to rescue from destruction this large amount of property, health and life. Then, on the principle "that national health is national wealth," we might rejoice in the great aggregate of happiness and national prosperity and the diminished expenditures for the relief of pauperism and crime.

Our Government, in the present military contest, appointed a Sanitary Commission composed of distinguished physicians and other gentlemen of ability and scientific attainments, to inspect the camps and hospitals occupied by our soldiers, and report upon the most advisable means of providing against those diseases to which the Volun-

teer is liable through exposure, change of climate and of habits; the result was a report the most valuable and exhaustive that has ever been made upon this subject, and the valuable suggestions contained in it have done very much to improve the sanitary condition of the Federal army.

I have not alluded to the many highly important discoveries which have been made by the profession and I will only mention, in the language of a distinguished writer, a single one of them. "The single discovery of Dr. Jenner, and the consequent expulsion of small-pox, will leave to the world, in health and active life, more than the expenses of all the colleges on the globe."

There was a class of unfortunates who were found by the benevolent spirits of the profession in garrets, cells, stables and out-buildings, chained like beasts of the forest and exposed to cold and hunger, to scourging and other indignities. Their condition was considered hopeless, when the profession interposed in their behalf and devised that system of moral treatment which has introduced the darkened, wandering intellect to all the comforts, conveniences, and to many of the luxuries of life; every necessary want being cheerfully relieved. Magnificent buildings have been erected for the insane in the best style of architecture, and spacious grounds filled with flowers and shrubbery, have been laid out with the greatest care and taste; the patients are placed in spacious and well-furnished apartments; libraries of well-selected books, instruments of music, engravings and paintings and every thing that can satisfy the requirements of a refined taste are furnished to them. With these surroundings, and the professional treatment of able physicians, it is not surprising that so large a proportion of this class of unfortunates should be restored to usefulness and society. How fortunate for them that light has dawned upon their condition and rescued them from the prison and the gallows for crimes and misdemeanors of which heaven had not made them responsible. The deaf and dumb too, and the blind, have been placed in asylums with similar conveniences and comforts and the same beautiful surroundings and light has been poured into the vacant chamber of the mind and they have been educated for usefulness and happiness.

Another class of afflicted humanity have more recently fallen under the observation, and awakened the sympathy of our profession. Many of them have been rescued from lives of vacuity, mental imbe-

cility and vicious degradation and educated to a degree of usefulness, virtue and intelligence by the gentle influence of physical culture and moral and mental training. The redemption of many of this class has been complete, while others have been much improved. These schools for imbeciles have been established in several States and are regarded as being very successful in their treatment.

There is another class from whom nature has not withheld her hand who appeal to our benevolence to be protected from themselves. I allude to the inebriate, whose morbid appetite no longer controlled by reason, corrupts the man.

No class or condition of men are exempt from this bane of our race; the high and the low, the rich and the poor, are alike its victims; it hurries them all into unhonored graves. Appeals to personal pride, the expostulations of friends, the tender pleadings of lovely woman, the view of the awaiting fate and the bright expectations of the Christian, are all unheeded. What then can save them from impending destruction? In this hour of despair, our profession opens to them an asylum; the morbid appetite is treated as a disease; the shattered frame is invigorated; reason returns to her throne and the patient walks forth in the proud consciousness of being again a man. Such institutions for inebriates have been for many years in successful operation in Europe. And in the State of New York an appropriation has been made and ample buildings are nearly completed for this object. As a proof of the great want that is thus supplied, it is stated that over four thousand applications for admittance have been already made.

But why allude to these institutions so recent in their origin, when the world is indebted to the medical profession for all the institutions for the relief of suffering throughout the civilized world. These had no existence in the days of Rome, when her imperial splendor filled the world and her thousand cities rolled in wealth and luxury. Nor among the imperishable ruins of Athens, of Luxor, of Tadmor and Tyre. You will look in vain among the mouldering ruins of their magnificent temples for the broken column of the hospital or asylum for the unfortunate or the suffering poor. Not the eloquence of her Senate, nor that lofty public spirit which was the glory of her age, had any voice of sympathy for appealing wretchedness. But there was an edifice for the destruction of the feeble, the aged and the helpless, showing how dark and dismal was the path-

way of the unfortunate to the grave, unsheltered and unprotected by the hand of Christian benevolence. And what was true of that age is still the condition of the present, where Christianity and our profession have not exerted their ameliorating influences. Look at the plains of India, reddened with the blood and whitened with the bones of the devotees of Juggernaut. In that domain of death we find every vestige of sympathy obliterated from the heart of humanity; the innocent babe finds no refuge in the maternal bosom, and the Ganges bears away its horrid freight, the victims of a bloody superstition. Christianity has acknowledged her obligations to the profession in the ten-fold power with which the cures performed by physicians and the operations of skillful surgeons have armed its missionaries in their great work of emancipating these dark regions lying without the pale of Christianity, from the bloody rites and degrading ceremonies of Paganism. When we make allusion to the benevolent institutions which the profession has erected in every part of the civilized world, we do not claim that it is to the wealth of the profession to which the world is indebted for them—although according to their ability the members of our profession have always maintained a noble liberality—but their labors, services and influence have been freely contributed, importunately soliciting the means and demanding in the name of suffering humanity, from private wealth and legislative bodies, the necessary funds and appropriations for their erection and support. And when they have been dedicated to public charity, the ablest men in the profession have given their services without pecuniary compensation. It is conceded that at least one-third of all the professional services rendered by physicians in the city, and in the country perhaps much more, is gratuitous, with no other compensation than the consciousness of doing good and contributing to relieve the mass of suffering and misery which meets us on every hand. No other profession renders to all men such an amount of service for the same pecuniary compensation. The physician, from the philanthropic nature of the profession, is regarded by the public as the guardian of health who obeys every call made upon him for services, regardless of pecuniary compensation and personal comfort; he is called upon in midnight darkness and in tempestuous storms, as well as in the glad sunlight when nature displays around him all her charms. In these ministrations of mercy he

renders the same cheerful services to the poor as the rich, remembering that the poor were the especial recipients of divine ministration and miraculous power when the Savior of mankind descended on his great mission of redemption to our fallen race, regarding man as deriving his true dignity and importance from his immortal destiny. It has ever been the glory of the profession, from its early founders to the present time, that it has carried light and comfort into the lowest depths of suffering humanity, and gentle as the dew, distilled peace and happiness on the abodes of the poor —following thus in the pathway of Him who brought salvation to earth and shared with the poor the bitter cup of life, who often relieved the stern necessities of their condition by making them the especial subjects of his miraculous interposition, and who, when the days of his humiliation were ended, left them as the heritage of the profession forever, "to be visited in sickness and in prison," and he promised as a reward for enduring faithfulness, that He would make it one of the great considerations of eternal happiness in the retributions of the Judgment Day.

But how vast are the obligations of society for the benefits that forensic medicine has given to the high tribunals of justice in its researches and investigations on the nature and detection of poisons which are found in the mineral and vegetable kingdoms, which had been for all preceding time, secret and terrible agencies in the destruction of human life. So certain and reliable are the tests for these poisons that the smallest quantity of the most subtle of them cannot escape detection in the human system long after the grave has closed upon its victim. Also, on the nature and results of wounds and other acts of malicious violence, and in unveiling the insane mind and determining the degree of insanity and consequent moral accountability of the accused; in the detection of feigned insanity, the frequent pretence of the most desperate and depraved offenders. On these and many other subjects of jurisprudence, courts and jurors have been instructed by the profession in cases involving the rights, privileges and lives of the community; protecting the innocent from undeserved punishment on the one hand, and detecting with unerring certainty the guilty on the other. As therefore the great ends of justice are promoted by the certainty of punishment, the medical profession has contributed greatly to the pro-

tection of human life and has thrown such safeguards around society that we repose in comparative safety as well in the midnight silence of our habitations as in the open day and in the crowded thoroughfares. We see that humanity pleads in behalf of the medical profession because it has been, through its colleges, medical schools and their alumni, the originators and discoverers of many great improvements in the useful arts, and powerful agents in the advancement of science which have so largely contributed to the happiness and elevation of mankind; in the innumerable blessings that it has dispensed through its hospitals, asylums, cliniques and other institutions of public charity; for the uncanceled debt of centuries rendered to the suffering poor of all Christian lands; for the obligations which the missionary has acknowledged in breaking up the iron reign of ignorance and superstition "in the region and shadow of death;" for the assistance which forensic medicine has rendered to the enforcement of law, throwing around society the panoply of its protection; in not only making life comfortable, but in greatly increasing its duration not only on the earth's surface, but by descending into dungeons and prisons, carrying light and comfort into the abodes of wretchedness and crime. For these and other benefits already acknowledged, the profession is entitled to the gratitude of society, and we anticipate with delight the glowing prospects for the future, when the hosts of ignorance, superstition and fanaticism in all lands shall retreat in dismay to the dark caverns of the earth, before the light of scientific research and investigation breaking upon the masses of the population and extending the boundaries and enlarging the domains of the profession, subjecting even the uncontrolled winds, the secrets of the unfathomed ocean and elements still undiscovered in all the kingdoms of nature, to purposes of convenience and usefulness to mankind; adding new forces to the arts and sciences and new remedies in the subjugation of disease. But have the public properly appreciated our faithful services? have they estimated the moral courage and heroism of the profession in exposing themselves to the unsparing and terrible devastations of the plague, the cholera and other scourges that have visited the world and which have made such appalling havoc among medical men from the exposure that they have voluntarily assumed? Have they not been forgotten in the loud applause which a grateful public

has bestowed upon conquerors and patriots? The hero of the battle-field, the leader of the forlorn hope of struggling freedom, the splendid achievements of the patriot in civic life are immortalized by genius in song, in painting and in sculpture; but the fearless physician who falls in defence of the holier duties of humanity, falls unnoticed; neither mural tablet nor monumental marble commemorate the event. In this marked discrimination we will mark a few instances of the many. In the city of New York, not many years since, a noble band of our profession were seen falling one by one before a new and terrible epidemic until their ranks were fearfully thinned; the aged physician having the confidence of all around him, after having saved many lives, falls himself; the practitioner in the high noon of manhood falls by his side, while the young physician just entering on a career of fame and usefulness dies on the very threshold of the dwelling that has been made vocal by the blessings poured upon him by a grateful family. And does the profession falter with death in their midst? No, the ranks are immediately filled by others with the same devotion, cheerfully assuming the same exposures to the pestilence that walks in darkness. Many fall unnoticed, save by the survivors of that noble brotherhood to which they belonged and their desolate and stricken families; the public heart is cold as marble.

Take another instance. When a southern city was almost depopulated by a pestilential disease, and its brave physicians unflinchingly stood between the living and the dead discharging the perilous duties of the profession when all having the means of escape fled on the wings of fear from the scene of death, and when thousands too poor and too weak to follow them made loud appeals for assistance to fill the ranks of the fallen in the profession and save the remnant of the people, a noble band in a northern city heard that appeal and left the quiet and lucrative fields of their professional labor and the bosom of their families, to expose themselves in this atmosphere of death,—a large number of them fell martyrs in this holy cause, and when their lifeless remains were returned to their desolate homes no public demonstrations of sympathy nor funereal display of public sorrow rendered suitable honor to the courage and high devotion that was exhibited by these heroic men who sacrificed their lives to the dearest interests of suffering strangers.

In contrast with this, a few years since in the city of New York, two firemen fell—as fall the brave—in the fearless discharge of their duty. The city council was convened and voted the honors of the city and a public funeral expression of the public sorrow; sermons were preached in the city churches extolling the courage and virtues of these "humble men;" the funeral was attended by the city authorities, and a mourning host with craped banners, and the mournful bells of the city all united in giving utterance to the public grief; even the families of the deceased were supported and their children educated at the public expense.

We will cite a single instance more and we are done. We have noticed in Greenwood Cemetery, on a beautiful elevation, a lofty monument worthy of the wealth which erected it and the occasion which it commemorates—it bears the name of a pilot who shrunk not at the peril of his life in attempting the discharge of his duty in the effort to rescue a noble vessel and her crew during a terrific storm—the attempt was unsuccessful and all perished together. The lofty column, bearing the parted cable and broken anchor and other symbols of his profession, immortalize the event and attest the public appreciation of his heroism. Honor to the brave pilot who perils his life for others, but why withhold it from the medical pilot equally brave and fearless, who, with no eye upon him but that of Omniscience, treads the deserted streets of a plague-stricken city to rescue from a death equally certain. Is he less deserving? In all the emblazoned chronicles of devotion to the public can you instance a more devoted courage than is found in the annals of our unostentatious profession?

We are told that "in those dreadful days when death grew frantic with his work of slaughter, Hippocrates, the great father of medicine, stood up alone, night and day, to wrestle with the plague in terror-stricken Athens." And thus it has ever been whenever the panic-stricken people of any country have suffered from desolating disease; the physician has never been known to turn his back to danger. The soldier has often been panic-stricken, but the physician, never.

The profession have increased the obligations of humanity by the influence which they have uniformly exerted in supporting the laws and sustaining the government, in discharging all the duties

of citizenship, and by their intimate and social relations to each individual member of society, cementing together communities by weakening the disturbing elements of party spirit and sectional strife. The most devoted patriots in Revolutionary and modern times have been found in the ranks of the profession. Warren, the first martyr to the cause of liberty who fell at Bunker Hill, is among the illustrious examples.

The profession are always the ardent friends and patrons of every project for promoting education and improving the moral and intellectual condition of the people. In the erection of school houses, in establishing public libraries, in lectures for the diffusion of knowledge, in founding colleges, in building churches and in every other useful and philanthropic project for the improvement and elevation of the masses, the public have always relied with entire confidence on the influence and coöperation of a well regulated medical profession. And history, either ancient or modern, does not furnish a single instance in which they have conspired against the welfare of their patients, or betrayed the confidence of the public. These are among the noble and distinguishing characteristics of the profession. As great philanthropy has sometimes been exhibited in other professions. It is exhibited in that noble declaration of the hero of Buena Vista —"I will not leave behind me my sick and wounded." And it is attributable to the disinterested and merciful nature of our calling that the amenities of nations in hostile array have regarded the profession, in their attendance on the wounded, as exempted from the hard condition of prisoners of war.

We have seen that among nations where the profession has been best sustained and has been well organized, the annual mortality is least. No intelligent statesman will deny that it is the paramount duty of government to legislate for the best interests of the nation. And all wise governments will regard the health of its subjects and the protection of human life as taking precedence of all other interests.

It is believed by the best informed men in the profession that even in our Country and State, the proportion of unnecessary deaths is still large. Some have estimated it as high as ten, others as low as two per cent.

Many of these deaths are the result of ignorance, irregular practice tolerated by law; estimating this waste of life at 4 per cent. we have lost, in a population of 460,000, eighteen hundred individuals in a single year. Human life cannot be too highly appreciated, and in times like the present, when there is a dearth of men to sustain the great industrial interests of the country and when so many are called upon to defend their country in the hour of her danger and greatest peril, who can compute the priceless value of life? We have probably estimated the percentage of deaths too low; but is not the number sufficient to arouse the political economist and philanthropist to stimulate the public to institute some measures by which so unnecessary a sacrifice of human life may be averted.

There are two methods which, we believe, will secure in some degree this most desirable result which do not interfere with each other.

The improvement in medical education lies at the very threshold of all permanent and substantial reformation. Let Government foster and sustain all the educational interests and make liberal appropriations for gratuitous instruction in our medical institutions, and let no person be permitted to practice medicine or surgery without having their qualifications therefor subjected to a competent board of examiners, and we have no doubt that an improvement will soon be manifested and this wanton disregard of health and life, the promotion of which is a great fundamental interest among all good governments, no longer exist as the opprobrium of our Country.

It is admitted to be the duty of all good Governments to provide for the interests of such subjects as are unable to protect themselves—hence the provision which is made for all persons in their estates and support as minors, lunatics and others; and in our profession, appointments for the army and navy of the United States are never made until the applicants are subjected to a rigid examination by a medical board of distinguished surgeons. And the General Assembly of this State, at their annual session in 1861, by application of this Convention, in view of an "impending war," and because they regarded "the health, comfort and well-being of the militia of the State to depend very largely upon the qualifica-

tions of the medical staff," made provision in a law passed for the "regulation of the military force," that there should be a military board consisting of not less than three surgeons who should act as an advisary board to the Governor in all future appointments of surgeons and their assistants to the Connecticut volunteer regiments; and so well has this law been enforced that no appointments have been made by the Governor whose competency has not been subjected to a rigid examination by this board.

Now what is regarded as necessary for the army and navy, must be also necessary for the people themselves from which they are taken.

But why should the medical profession be regarded as unworthy or undeserving of all the rights and privileges which they have held until recently from the first organization of our State society, and which are conceded to the legal and clerical professions and in which they are protected by the strong arm of government. Are they less competent to discharge their duties than other professions? Are not the people more competent to judge of the qualifications of the clergy with that great system of theology, the Bible, in their hands, in which every duty is written as it were with sunbeams so plainly "that he that runs may read," and though a "fool he need not err"?

In the legal profession do not the people possess the statute laws, which should be so plainly written that every man can understand them and the rule of duty submitted to that unerring tribunal in every man's heart—the tribunal of conscience? And if there must be litigation are not cases in law submitted in arguments to able judges of law and to jurors who are judges of law and fact and to whom all the equities of parties are submitted, and from this, appeals are made to a higher judiciary? Are not the rights of property and life safe even from pretenders to law who may be employed as advocates in courts of law and judication?

The people are much more competent to judge of their moral and religious duties and of their obligations to their fellow men and to the government, than of the nature of diseases and the "thousand ills to which flesh is heir." The learned physician travels into regions in search of remedies whose depths have never been explored; in fields of investigation which are his undisputed

empire, to develop mysteries in the modification of mind and matter, in the modus operandi of medicines in our own intricate and incomprehensible structures, phenomena in pathology, substances and combinations in chemistry and botany yet undiscovered and deeply buried, still unrevealed although men of the most gigantic minds and profound investigation with the bright effulgence which has illuminated the 19th century, with the accumulated experience of all preceding time for their assistance. And yet they are unrevealed and undiscovered. And is it to be supposed that the man with a single idea—the mere pretender to medicine or the individual who does not even pretend to this, can understand enough to attempt to discharge the duties which devolve upon a learned profession?

This will appear more apparent when we compare our position with the every-day matters of common life. The statute laws of all States subject the flour and the fish and other provisions which are consumed by the people to competent inspectors who place their mark upon them. Even a teacher of a common district school cannot teach without an examination without subjecting the district to the loss of their proportion of the educational fund. Are health and life less important than the provisions which we consume, and the competency of the teachers of the fundamental branches of education of which the people are competent to judge, while in regard to the matters of disease they are certainly profoundly ignorant?

I am not aware that the profession have suffered pecuniarily from the repeal of the 8th section of the medical law by the legislature in 1843, but the people have suffered immensely in their dearest interests and the honor and dignity of the State has been degraded. As revolutions never go backward "we cannot expect the reënactment of the statute alluded to. Nor do we ask it; but this singling out the medical profession, with the learning, experience and accumulated wisdom of ages in its favor, in a matter of life and death to the community, on the ground that collecting fees is a monopoly, must be regarded as absurd and unjust, reminding us of an anecdote of a Turkish ambassador at the Court of St. James who was about to strike off the head of his servant for offending him and on being told that it would not be allowed in England, replied with great spirit, Is not this a free country?

But we have said that the improvement in medical education lies at the threshold of all substantial reformation in the profession. It is not enough to restore the profession to its former dignified position, with equal rights and privileges with other learned professions. The necessity of educating the other liberal professions is universally admitted; so imperative has been regarded the education of the clerical profession that everywhere schools of theology have given all the educational facilities required to place it in the highest condition of usefulness. We know of only one State that has provided for the medical education of her students for a mere nominal fee. It is conceded that the medical, ranks next to the clerical profession on the score of benevolence and usefulness; hence we have spoken of gratuitous lectures and other instruction to such meritorious students as are destitute of the necessary means of paying for their lectures, as an important reformatory measure of the age. There exists cogent reasons for unusual measures at this time for supplying the country with educated men. It may be regarded inappropriate, at a time like this, to speak of any new projects needing appropriations when the entire resources of our National and State governments are pledged to the vigorous prosecution of measures on the grandest scale of operations ever conceived for the suppression of a rebellion exceeding in magnitude any former international war in the annals of history. But there is a great dearth of thoroughly trained men in the ranks of our profession. It is well known that, previous to the present national crisis, the admissions into the profession only supplied the loss by death, leaving no provision for the vast increase of population. This destitution will be severely felt in the less populous and more impoverished portions of our country where so large a number have been called into the national service. Will not the people that remain, fall an easy prey to depredations of empiricism in its protean forms? thus rolling back upon them such waves of desolation as will bury the results of long years of the persevering toil of our cotemporaries. Will they not present a reasonable claim upon government for evils incident to their condition? Do we not provide courts of justice, internal improvements, and the means of popular education?—and why withhold the protection to health and life when we have seen that half a century has extended the duration of life from forty to fifty years, or twenty-five per cent.

For a long period of years the State of New York has distributed seven thousand dollars annually to her medical institutions, and no one has dared to question the wisdom or expediency of the measure. May we not hope that when the clouds of war that now darken the horizon of our land shall have passed away, some voice may be heard from the footstool of power which will make provision for the people who are occupying the new and impoverished regions of our country. The small appropriation of two thousand dollars a year will, it is estimated, furnish lectures to forty students, who shall be recommended by a competent board as possessing the requisite preliminary education, good moral character and other qualifications for the profession of medicine; and we have no doubt that our liberal and distinguished faculty of Yale College will admit them gratuitously to a second course of lectures. Such an example would soon be followed by other States. Our State has poured out its treasure like water for the prosecution of the war, which is creditable alike to her liberality and patriotism, and we ask only a trifle of what is used for other purposes for this cause of humanity.

War destroys the enemies of the Republic while we preserve the lives of its citizens. The former, we have seen, celebrates its victories by public demonstrations, the other quietly points to the hosts of living men rescued from the grasp of the King of Terrors. No matter if our bloodless achievements are not commemorated so long as we hear the voice of that ancient patriarch, who was the embodiment of the profession among his people, over the grave of more than thirty centuries proclaiming—"When the ear heard me, then it blessed me; and when the eye saw me, then it gave witness unto me. Because I delivered the poor that cried, and him that had none to help. The blessing of him that was ready to perish came upon me; and I caused the widow's heart to sing for joy. I was eyes to the blind, and feet was I to the lame." Thus, in the beautiful and sublime language of the Bible, we have this truthful delineation of our labors.

I had intended to allude briefly and commendingly to the action of our General Assembly in the appropriation made for our insane poor and the State hospitals, which latter have been highly useful to the Government in furnishing accommodations for the wounded of the volunteer force of this and other States;—and also to have re-

viewed the inconsistent action of the legislature regarding the insane convicts of this State, for whom suitable accommodations had been erected with all the modern appliances for their relief and comfort consistent with the public safety, when a sudden change of policy coming over the legislature this humane and enlightened scheme, in keeping with the dictates of humanity and in accordance with the benevolent spirit of the age, was abandoned, and so they remain imprisoned in dungeons and common jails for offences against laws of which they cannot be guilty—for the Almighty has not made them accountable. Christianity and humanity pray for some amelioration of their condition; but we can only lay their claims for relief before another legislature.

But I have filled my allotted space in the proceedings of this occasion with the brief and imperfect view I have taken of the progress of the profession and some of the benefits which have resulted to the world from its labors. I cannot close however without an allusion to the founders of our venerable society, whose seventieth anniversary convention we now commemorate. Not one of them remains! —but the infant society which they organized has attained the vigor and strength of manhood and exhibits none of the infirmities of age. The learning, respectability and worth of the medical profession have rallied under its banner, and the monuments of its progress are found in its medical colleges, retreats, hospitals and kindred institutions of learning and philanthropy.

ARTICLE VII.

BRIEF SKETCHES OF THE EARLY PHYSICIANS OF NORWICH.†

BY ASHBEL WOODWARD, M. D., OF FRANKLIN.

[*Read before the New London County Medical Meeting, April* 17, 1862.]

Of the physicians generally of the American colonial period, little is now known. As a class they were not ambitious to participate in public deliberations, or take the lead in advocacy of popular measures, so that only few names became prominently identified with local or general history. Many devoted to the duties of their calling the undivided energies of long and laborious lives, reaping only a scanty pecuniary recompense for the present, and no place at all in the grateful recollection of posterity. Respected and loved by cotemporaries with that respect and love which strikes such deep root and blossoms so beautifully in the chamber of suffering, they were too frequently forgotten when their own generation had passed away.

No systematic account of the early physicians of Norwich has hitherto been given. The materials for such a work are fragmentary, and collectable only with great difficulty and labor. Public records afford little assistance, while the scanty aid they might otherwise render is still further impaired by the general omission of any professional title from their names. Another peculiar circumstance of the present case cuts us off from one source of information, which in many localities is highly fruitful. During the early colonial period (as has almost always been true in the infancy of nations) the professions of theology and medicine frequently met in the hands of

† Ancient Norwich included within its limits till May, 1786, the towns of Franklin, Lisbon and Bozrah and a part of the town of Preston.

the same incumbent, the cure of fleshly ills being esteemed an incidental concomitant to the cure of the more dangerous maladies of the soul. These clerical physicians exercising their double vocation amid a people justly celebrated for affectionate attachment to the expounders of the divine oracles, were often minutely remembered and described for after time, in virtue of the popularity of the priestly office. But in Norwich, the two professions were kept entirely distinct from the beginning, so that ecclesiastical writings in all the multifarious forms they then assumed, are wholly unavaling to the biographer of her early doctors.

Of some of these, almost the only memorials are the precarious inscriptions of moss grown and neglected tomb-stones. Others whose days of toil and nights of watching in alleviation of human pain were otherwise forgotten, still live in the hearts of their descendants, and in traditions floating downward in the same current with their blood. The names of several enter largely into cotemporary records, whereby we may infer the prominency of their influence, though the various proceedings they shared in and the trusts imposed upon them, must be passed in silence as too common-place for exhumation in our brief tribute to their memory. Yet it should not be forgotten that, as a citizen, one may be prominently useful, and still perform few actions whose recital either interests the attention or quickens the pulses of posterity.

The medical profession in ancient Norwich was more than respectable; was distinguished. As practitioners, several of its members had few superiors on the continent. As reformers of abuses and fearless advocates of salutary though unpopular changes, they held place in the foremost rank. In the year 1763, prior to any attempts at medical organization elsewhere on the continent, Theophilus Rogers, with ten others, petitioned the colonial Legislature for the charter of a medical society. This movement, made in advance of the age, was negatived in the lower house. Still it indicates one of the most important crises in the history of the profession. The presentation of that unpretending Norwich memorial, was the initiative step in a series of efforts which have since resulted in the permanent establishment of many flourishing State associations, and within a few years, of the *National* society, which has contributed in a high degree to purify the ranks, elevate the aims, and make a *real* unit

and fraternity of the profession in America. In the attempt alluded to, it was not the object of the petitioners to secure any immunities or exclusive privileges for themselves, but to protect the health of the community by additional securities. At that time there was no authority in the State, legally qualified to confer Degrees in a way to discriminate the man of solid acquirements from the ignorant pretender. Many, without either study or natural aptitude for the exercise of the calling, by shameless vauntings imposed upon a credulous populace, and by assuming their title, brought discredit upon honorable men. Our Norwich memorialists wished to strike at the root of this disgusting and rampant empiricism. To shut down the floodgates through which their ranks were inundated by incessant streams of ignorance and charlatanry, to establish a standard of education by making a respectable amount of attainments an indispensable requisite to the acquirement of the title, they asked for the appointment of a committee legally authorized to examine and approve candidates, if found qualified. Thus Norwich, though unsuccessful in her first attempt, was the pioneer in the cause of American medical organization.

As early as 1785, when there were but two medical schools in the whole country, Drs. Philip Turner and Philemon Tracy issued proposals for the delivery of a series of lectures to students on "Anatomy, Physic, Surgery, &c." As additional incentives to induce the "rising sons of Æsculapius" to improve the facilities proffered to them, they tendered the free use of a "complete library of ancient and modern authors," together with "the advantage of being present at capital operations, dissections, &c." The prospectus goes on to state, that "every attention will be paid by the subscribers to render their lectures both useful and pleasing, their constant endeavors will be to facilitate the instruction, direct with propriety the judgment, correct the errors, and increase the knowledge of the pupils in their study."

Another interesting point in the history of Norwich was the long and bitter controversy between the advocates and opponents of inoculation for small-pox. At that period this disease was the most formidable scourge of humanity. There was no place of refuge from its ravages, nor means of mitigating the fury of its poison. Inoculation having been practiced with success in Turkey, had recently, through Cotton Mather's influence, been introduced into the

Colonies. Commencing in 1760, for many years several of the more prominent physicians of Norwich struggled assiduously to establish the practice against the inveterate prejudices of the community. A popular vote, authorizing pest houses, passed after the lapse of a third of a century, shows how obstinately the public contended before yielding to the superior arguments of the profession.

Our preliminary remarks applying to the profession of Norwich collectively, by obviating the necessity of repetition, will enable us to make our sketches of individuals brief, and in these we shall confine ourself to the first one hundred and fifty, of the two hundred years.

Dr. Solomon Tracy was among the earliest, if not the very first physician of the infant settlement of Norwich. He was the fifth son of Lieutenant Thomas Tracy, one of the thirty-five original proprietors of Norwich, whither he came with his father, brothers and sister, in 1660, at the age of nine years.

He married first, November 23d, 1676, Sarah, daughter of Deacon Simon Huntington, by whom he had a daughter Lydia and son Simon.

The accomplished historian of Norwich says of him, "He must be remembered among the *solid men* of the first generation, very active in all town affairs, Constable in 1681, Selectman for a long course of years, and always chosen for what was called the east end of the town." He probably resided therefore, at, or near, the old homestead of his father, east of the meeting house.

He died July 9, 1732.

Limiting the active professional career of Dr. Tracy to forty years, the descendants of Lieutenant Thomas Tracy, in the male line, have held distinguished rank as physicians for more than one hundred and seventy-five of the two hundred years that Norwich has had a history.

Dr. Caleb Bushnell, son of Captain Richard Bushnell, is the next physician of whom any account has been discovered. He was born May 26, 1679, and married, January 9, 1699–1700, Ann Leffingwell, having by her, a son and five daughters. It is believed that his early location was near the residence of D. W. Coit, Esq. At a later period he probably removed to the Landing.

Captain Bushnell, as he was more generally called, died Feb. 18, 1724–5, having accumulated by sagacity in business, an estate of about £4,000.

He was "townsman" in 1709 and 1713, besides holding from time to time, other public trusts.

Dr. David Hartshorn was the sixth son of Thomas Hartshorn of Reading, Mass., where he was born in 1656. He married, in 1680, Rebecca Batchelor, and had sons Jonathan, David, Samuel, and Ebenezer, and daughter Rebecca.

He first located in business in his native town, where he continued till about the year 1700, when he removed to Norwich West Farms.† In this new field of labor he was highly esteemed as a physician, and was a leading man both in civil and ecclesiastical affairs. He was also one of the original deacons in the church, and generally held in trust the funds of the society. Dr. Hartshorn died Nov. 30, 1738.

Dr. John Sabin was born in Pomfret, Windham county, Conn., 1696. Returning early to the eastern part of Franklin, he acquired an extensive practice. Upon his tomb stone is stated that he was captain of one of the Norwich foot companies. The fact that he was several times deputed as agent to transact important business with the Legislature, shows that he was held in high estimation. He died March 2d, 1742.

One of his descendants is now a member of the United States Senate.

Dr. Joseph Perkins was the eldest son of Deacon Joseph Perkins, who married Martha Morgan in 1700. His lineage runs back to the first settler of the name who came to America in the ship Lyon of Bristol, in company with Roger Williams, in 1631.

Dr. Perkins was born in 1704, and graduated at Yale College when twenty-three years old. Having enjoyed the best medical instruction obtainable, he opened an office in the present Lisbon. Possessed of brilliant talents, ardent in the pursuit of knowledge, and venturesome in experiment, he became distinguished as a daring surgeon. Most of the capital operations of the circumjacent country were performed by his hand.

Attempting on one occasion a hazardous operation, the patient,

† The present town of *Franklin* was formerly known as *Norwich West Farms.*

a slave, died under the knife. Chagrined at the loss, the master charged the surgeon with having sent his victim prematurely to the Devil. "It is fortunate" said Perkins, "that the only loss falls upon the owner, as the slave could not possibly suffer from an exchange of masters."

Dr. Perkins was also a man of piety, patriotism, and benevolence. He filled the office of deacon from 1756, till his death July 7, 1794.

A brief notice of the members of his family may not be uninteresting. He married, July, 1730, Mary second daughter of Dr. Caleb Bushnell, already noticed. His eldest son, Dr. Joseph, born in 1733, became an eminent physician in his native town; was the father of Dr. Joseph Perkins, late of Norwich and Dr. Elijah Perkins of Philadelphia who died in 1806, and the grandfather of the present Dr. N. S. Perkins, of New London.

The fourth child, Dr. Elisha Perkins of Plainfield, acquired a world wide notoriety as inventor of the "medical tractors" from the use of which many supposed cures were reported in Europe, as well as in America.

The seventh and youngest, Dr. Caleb Perkins, practiced in West Hartford. He married a sister of the author of McFingal.

Thus much for the earliest list of doctors.

Dr. Theophilus Rogers was born at Lynn, Mass., Oct. 4, 1699, the sixth in descent from John Rogers, the proto-martyr who was burned at Smithfield, Feb. 4, 1555. Dr. Rogers studied his profession and practiced for a while in Boston. Afterward, removing to Norwich West Farms, he entered upon a wide sphere of usefulness. Dr. Theophilus Rogers died at Norwich, Sept. 29, 1753.†

Dr. Ezekiel Rogers, eldest son of the above, was born at Norwich, Oct. 2, 1723. Talented and amiable, he entered upon his profes-

† Dr. Theophilus Rogers was the second son of Captain Ezekiel Rogers, an instructor of youth, and the widow Louis (Ivory) Bligh, of Lynn, grandson of Ezekiel Rogers and Margaret Hubbard of Lynn, and great grandson of the Rev. Nathaniel Rogers and Margaret Crane of Islington parish, in Suffolk, England. The latter, came to America in 1636, settling in Ipswich, Mass.

Dr. Theophilus, married Oct. 20, 1720, Elizabeth, second daughter of William Hyde and Anne Bushnell, of Norwich, who was the third son of Samuel Hyde and Jane Lee, and grandson of William Hyde the emigrant ancestor of that family.

sional career with bright prospects. But the hopes of many friends were doomed to disappointment, for in the flower of youth he died Nov. 11, 1745.

Dr. Theophilus Rogers, Jr., younger brother of the above, having studied with his father, located in business at Bean Hill. The labors of an extensive practice he performed according to the usual custom, on horse-back. In the Revolution, Dr. Rogers was a staunch whig, a member of the committee of safety, and very active in the cause of liberty.

He married March 25th, 1754, Penelope Jarvis, of Roxbury, Mass., and had one son and three daughters. He died of Consumption, Sept. 29, 1801, aged 70. He was noted for rigid adherence to etiquette and nicety in matters of dress and appearance. Habitual courtesy, graceful manners, and skill in the winsome play of conversation, threw a charm around his presence which was felt alike by young and old. The name, and family, have been distinguished in both the medical and clerical professions, on each side of the Atlantic.

Dr. Elihu Marvin was born in Lyme, about the year 1753, graduated at Yale College in 1773, and afterwards studied medicine with Dr. Theophilus Rogers, 2d, whose daughter he married. Entering the American army during the Revolutionary war as a Lieutenant, he soon won a high character for bravery, activity and efficiency. With others, he suffered at Valley Forge on "the dreadful winter." Leaving the army before the close of the war to resume the practice of medicine, he located at the "Landing." Fond of military affairs he was subsequently prominent in organizing the militia, and became Brigadier-General. As his fine talents were supported by an attractive countenance and genial social qualities, he was a general favorite, being much honored, both in and out of his profession.

When the Yellow fever broke out in New York, in 1798, he determined to visit the city in order to study the disease and qualify himself for its successful treatment. On returning home, he fell the first victim to that pestilence, a voluntary sacrifice offered up on the altar of humanity. Like many noble brethren in a calling around which dangers thicken frightfully when "pestilence walketh in darkness, and destruction wasteth at noonday," he offered his own life in the devoted endeavor to ward off the blow of the destroyer from

others. His death sent a pang through the community, falling crushingly upon an amiable wife, and six young children.

"What's noble let's do it."

Dr. Christopher Huntington, a resident of that part of Norwich now called Bozrah, was the eldest son of Christopher, of West Farms, and grandson of Christopher, the first male child born in Norwich. Dr. H., appears to have been the sole physician of New Concord during its early history. He also held the offices of deacon and clerk in the church; died in 1800.

He married, Sept. 29, 1748, Sarah Bingham, and had six children of whom the youngest, Christopher, became a physician.

Dr. Benjamin Wheat was a son of Dr. Samuel Wheat,† of Cambridge, Mass., where he was born, about 1709. Having studied the usual preliminary branches under the tuition of his father, he removed to Norwich at the early age of twenty-one. He resided where Thomas Billings, Esq., now lives, in the valley, just south of Bean Hill. For nearly thirty years he continued in active practice, meanwhile instructing students in the principles of the healing art. At the death of his father, Dr. Samuel, in 1750, the son inherited his valuable library, several volumes of which, containing the autograph of the ancient owner, written in bold and smooth hand, are now in the writer's possession.

Dr. John Barker, whose residence was located in the eastern part of Franklin, was the eldest son of John and Hannah (Brewster) Barker, and was born in Lebanon, Conn., in 1729. The ordinary school advantages of that day he carefully improved. As a medical student in the office of Dr. Joseph Perkins, his close application, keen insight into the mysteries of disease, and particularly his quick and accurate interpretation of equivocal symptoms, gave certain promise of future success. Commencing business in 1750, he labored in the same field for more than forty years, till stricken down by death. As a physician, Dr. Barker enjoyed an enviable popularity, both with the public and the profession. He was extensively employed

† Dr. Samuel Wheat was son of Samuel, born at Concord, Oct. 25, 1641. The first Samuel, was son of Moses and Thomasine Wheat, who came from England in the ship Elizabeth, in 1635, the second year after the settlement of Concord.

in consultation throughout eastern Connecticut, and great deference was yielded to his opinions.

He was one of the original memorialists who petitioned the Legislature for a medical society. Not discouraged by the failure of that attempt, he and his compeers persevered till ten or twelve years later their efforts resulted in the organization of a voluntary association, with Dr. Barker for its first President. To this position he was annually reëlected so long as he lived.

Many anecdotes of Dr. Barker are still preserved. For these, we have no room. But even without collateral evidence, these would show that he was a man of sparkling wit, quick perceptions, sound common sense, and not least, a generous heart. It was to these strong and noble traits of character that he owed his success, for he was not graced with elegance of person or polish of manners, nor did his pointed repartees derive their force from any fastidious selection of words. His careless and slovenly habits, led a cotemporary to remark,

> "Barker, a diamond was, both coarse and rough,
> But yet a diamond was, of sterling worth."

He died June 13, 1791, of cholera-morbus. On the 19th, of Sept. following, Dr. Philemon Tracy, by appointment delivered a eulogy on his life and character, before the New London Co. Medical Society.

Dr. Elisha Tracy,† son of captain Joseph Tracy, was born at West Farms in 1712, and graduated at Yale college in 1738. It was the wish of friends that he should enter the Ministry, but having a greater preference for the profession of Medicine he decided to devote himself to its pursuit, and accordingly commenced studying under the direction of Dr. Theophilus Rogers, Sr. He possessed thorough classical scholarship and was well versed in medical literature.

In 1775 Dr. Tracy was appointed one of the members of a committee to examine all candidates applying for situations in the Army, either as surgeons or assistant surgeons.

By his earnest advocacy of inoculation for small-pox, he encountered a storm of prejudice and persecution. By two grand jurors

† Elisha Tracy, by first marriage with Lucy Huntington, had a daughter Lucy, who became the wife of Dr. Philip Turner.

By second marriage with Elizabeth Dorr, of Lyme, he had a son Philemon.

of the county, he was presented "for communicating the small-pox by inoculation to Elijah Lathrop and Benjamin Ward, both of Norwich aforesaid, and sundry other persons against the peace, and contrary to the laws of this State." Pleading guilty to the charge, he was held in a recognizance of sixty pounds, to appear and answer before the county court. He was fortunate, however, in living to see his own views very generally adopted by the community.

Dr. Tracy was author of the inscription in memory of Samuel Uncas, that brought to light the obscure Indian word "Wauregan," which has since acquired great local popularity.†

After an active life of forty years, he died in 1783, widely beloved and lamented.

Dr. Philemon Tracy, son of the preceding, was born May 30, 1757. Having enjoyed the professional teachings of his father and Dr. Philip Turner, he practiced medicine in his native town for more than fifty-five years. His forte lay in the patient and thorough investigation of chronic diseases, especially those which, from their complications, demanded deep research and accurate discrimination.

Honorable as a counselor, and faithful as a physician, his services were extensively sought, both at home and abroad.

The following "recollections" are from the pen of one of our most gifted authoresses :‡—"As a man, greatly distinguished in his profession, grave in manner, courteous in speech, held as an oracle in counsel, studying the cases of his patients with a profound attention that won their confidence, as his sympathy did their grateful regard. His habit was minutely to investigate every symptom before prescribing, to require strict obedience to his prescriptions, to regulate diet and regimen, and to give as little medicine as possible. I well remember his dignified deportment, his originality in conver-

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† The epitaph is as follows :—

"For beauty, wit, for sterling sense,
For temper mild, for eloquence,
For courage bold, for things *wauregan*,
He was the glory of Mohegan—
Whose death has caused great lamentation
Both in ye English and ye Indian nation."

‡ Mrs. Sigourney.

ation, and that in early childhood I thought him a tutelary being, and that he had power to heal all diseases."

We cannot forbear to add that we remember with gratitude, in our early professional intercourse with Dr. Tracy, his courtesy, his many acts of kindness and words of encouragement.

Passing to the "*Army Surgeons*" we are compelled to confine our remarks to the briefest limits. The first on the list is

Dr. Richard Tozer. He was a student of Dr. Benjamin Wheat, and afterwards served as surgeon's mate in the corps attached to the forces under Gen. Wolcott in the Louisbourg expedition. Dr. Norman Morrison of Hartford, was the surgeon of the regiment. This was in the year 1745. Though this military enterprise was successful, Dr. Tozer never returned, but died at Louisbourg.

Dr. Jonathan Marsh, a native of Wethersfield, but resident of Norwich, was appointed surgeon to the force sent against Crown Point, in August 1755. The following year he also accompanied a second expedition against the same place in the same capacity.

Dr. Marsh was chiefly distinguished for success in bone setting. His death, in 1766 was caused by disease consequent upon the absorption of virus in treating a wound accidentally inflicted in Hartford at a celebration of the repeal of the Stamp Act.

Dr. Jonathan Marsh, Jr., eldest son of the above, was twelve years old when his father died. But under the tuition of his mother who claimed skill in the art of bone setting, he became famous in that special department. His death, April 18, 1798, was esteemed a public calamity.

Dr. Elisha Lord, son of Cyprian† and Elizabeth (Backus) Lord, was born Aug. 10, 1726. He located first at Farmington, but subsequently returned to Norwich. After accompanying the troops sent against Crown Point, he was appointed, May, 1758, surgeon to the first regiment. In this capacity, and as director of hospital stores, he served till Dec. 22, 1760. He died at the age of forty-two.

Dr. Philip Turner, son of captain Philip and Ann (Adgate) Turner, was born Feb. 25, 1739–40. Having enjoyed the excellent

† Cyprian, was a son of Benjamin and Elizabeth Lord, and was born at Saybrook, March, 1702.

instructions of Dr. Elisha Tracy, he received, in March, 1760, the appointment of assistant surgeon to a Provincial regiment stationed at Ticonderoga, under the command of General Amherst. The exterior advantages of fine person and graceful address were passports to the society of those whose friendship, in a professional point of view was likely to prove most profitable. His intimacy with the English surgeons afforded opportunities for improvement rarely enjoyed by men from the colonies. For at that period when existing medical literature was for the most part locked up in the Latin tongue, the principal resources of the young and inexperienced practitioner were the precepts he had treasured up from the oral teachings of his instructor. The European surgeons were as a class, too pretentious and exclusive to think of imparting information to their backwoods cousins. But Dr. Turner was treated by them with marked courtesy and thus enjoying ample facilities for learning the most approved methods of operation and treatment.

Having continued with the army till the Peace of 1763, he then returned to Norwich, where he practiced the art of surgery with distinguished success. Upon the commencement of hostilities with England he accompanied the Connecticut troops on their first campaign before Boston. He was also with the army at New York in 1776. The disastrous battles of Long Island and White Plains brought into requisition all the resources of his ingenuity and professional skill.

In 1777, Dr. Turner was appointed surgeon-general, of the eastern department of the army, which position he ably filled till near the close of the war. He then returned to his former field of private labor, where he stood unrivaled as an operator.

About the year 1800, he removed to the city of New York. Shortly after, he was appointed surgeon to the staff, in the United States service, and stationed at York Island. This post he held till his death in 1815. He was interred with military honors.

Dr. Turner possessed in an eminent degree, the essential qualifications of a surgeon; accurate judgment, unflinching resolution, and steady nerve.

The late Dr. Shippen of Philadelphia, remarked that he had never, either in Europe or America, seen an operator who excelled him.

During the period of his civil practice, many students sought his instructions. The recommendation of the teacher was esteemed by his pupils a sufficient guaranty of success.

He married early in life, the eldest daughter of his medical instructor, and had two sons. The eldest,

Dr. John Turner, born in 1764, seemed to inherit the strong qualities of his father's mind, and to surpass him in acuteness of perception and nicety of discernment. Familiarity, from early boyhood, with the duties and practical details of medical life, gave direction to his tastes, and was insensibly fitting him to adorn his future calling. It was his peculiarly happy lot to have no enemies, and a large circle of devoted personal friends. This was owing to genuine benevolence of soul, manifesting itself in all the relations of life. Not to mention the heart ever welling forth sympathy for the suffering, the tongue that spoke no words to the sick but words of consolation, or cheer, the generous bearing of Dr. Turner toward medical brethren, his freedom from professional jealousy, and his exertions to promote their welfare, indicated the true nobility of the man. He died in 1837.

We append a list of those who began practice before the present century. We aim to condense as much as possible. A majority of them were members of the Connecticut Medical Society:

Dr. Obadiah Kingsbury..... 1735–1776
" Nathaniel Hyde..... 1746–1832
" Elijah Hartshorn..... 1754–1839

Were born in West Farms, (Franklin) studied with Dr. Barker, and practiced in their native town.

Dr. Benjamin Ellis, son of Rev. John Ellis, born at West Farms, 1752, student of Dr. Joshua Downer of Preston; field of practice, Franklin; died in 1845.

Dr. John Scot was born in Groton, studied with Dr. Elisha Tracy, and settled in Bozrah. He possessed great professional merit, taught many students, and died at an advanced age.

Dr. Luther Manning was born in Windham, Conn., 1748, studied with Dr. Cheney, and settled in Lisbon, where he died, in 1813.

Dr. Jedediah Burnham was born at Lisbon, 1755, studied with

Dr. Joseph Perkins, Sen., and for a time practiced in his native town. Late in life he removed to Ohio, where he died, in 1840.

Dr. LEMUEL BOSWELL, a cotemporary of Dr. Marvin, possessed an extensive practice at the Landing.

Dr. BENJAMIN MOORE, who died at Demarara about 1790, for a time practiced in the city of Norwich.

The following were natives of Norwich, but engaged in practice elsewhere:

Dr. WILLIAM WHITING, son of Colonel William Whiting, was born in Bozrah, 1730. Having studied with Dr. John Bulkley, of Colchester, he was appointed in May, 1758, assistant surgeon of the second regiment of Connecticut forces. After the close of the French war he settled at Hartford, but subsequently removed to Great Barrington, Mass., where he became distinguished as a patriot and civilian.†

Dr. PHINEAS HYDE, son of Phineas Hyde, and maternal grandson of Dr. Theophilus Rogers, Sen., was born at West Farms, 1749. He practiced successively at Poquetanock and Mystic. During the Revolution he was a surgeon in the United States service, both in the army and navy. He died in 1820.

Dr. LUTHER WATERMAN was born at West Farms, about 1750. He married a daughter of his preceptor, Dr. Baker. He was attached as surgeon to the forces under Colonel Knowlton, during the campaign of 1776. After the war he removed to the West.

Dr. ELIPHAZ PERKINS, son of Captain John Perkins, was born at Lisbon, 1753, graduated at Yale college, 1776, studied medicine with Dr. Joseph Perkins, his uncle, married a daughter of Dr. Fitch of Canterbury, and settled in Vermont. Toward the close of the century he removed to Marietta, Ohio, where he died in 1828, greatly respected as a physician.

Dr. ABIJAH PERKINS, younger brother of the preceding, entering the Revolutionary war as a surgeon, was taken prisoner by the British at New York, and having barely crossed the threshold of manhood, fell a martyr to the cause of Liberty.

Dr. JONATHAN KNIGHT was born in Lisbon, 1758, studied with Dr.

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† *Vide* Alden's Biog. Notices in the American Quarterly Register, Vol. VII.

Cheney, and in 1777 received an appointment in a regiment under the command of Colonel Durkee, of Norwich. He was at Valley Forge during the most disheartening period of the war. Leaving the army in 1780, he subsequently settled at Norwalk, where his useful and eventful life was brought to a close, in 1829. Professor Knight, of Yale college, is his son.

Dr. Abel Huntington was born in Franklin, 1777. He located at East Hampton, Long Island, was a member of the New York Senate, and from 1833 to '37 represented his district in Congress, besides filling other offices from time to time, and always worthily. He died in 1858.

ARTICLE VIII.

HYPODERMIC MEDICATION.

BY BENJAMIN H. CATLIN, M. D., OF WEST MERIDEN.

[*Read before the New Haven County Medical Meeting, April* 10, 1862.]

As the subject of the Hypodermic treatment of disease has not been presented before this Society, I propose to give the results of my own experience by stating a few cases, hoping it may be not entirely without interest, to at least some few in the Society.

Case 1st. A. F., aged about 50. A man inheriting an iron constitution but which had become shattered by long continued irregularities, and excess in reckless exposure, hard labor, gluttonous eating and intemperate drinking. He had been greatly afflicted for more than six months with severe attacks of Asthma, which were but slightly relieved by medicine. It was not a favorable case for the new treatment, but as it was accompanied with severe pains about the chest and stomach, I determined to give it a trial. In the afternoon of August 20, 1860, I injected a grain of the Acetate of Morphine, dissolved in rain water, under the skin over the stomach. In eight or ten minutes the pains were gone, and he had a more comfortable night than he had had for many weeks previous. Otherwise it had but little influence upon the Asthma and it was not repeated.

Case 2d. G. G., aged 44. A strong healthy Irish farmer. I was called to visit him Nov. 20, 1860. He was then suffering from a severe cold, attended with some fever and a troublesome cough. In the course of four or five days he so far recovered as not to require medical attendance. I was called to him again, Dec. 3d, I found he still had considerable cough and in addition to this, a severe attack of Sciatica. I continued a cough mixture which he had been taking with the addition of Tinct. Actea and Dovers Powders, with extra Opium. Dec. 5th, no better; gave with the Tinct. Actea, Tinct. Veratrum

viride; seventh day, no improvement, little or no sleep, increased the opium; eighth, no relief or rest from the large doses of opium. Towards evening I injected a grain of the acetate of morphine, under the skin, over the seat of the disease; in ten minutes he was entirely free from pain, and I think he was in five, though it was so unexpected to him that he was unwilling to admit it. He slept well all night except that he awoke once and took some of his cough medicine. I saw him in the evening of the 9th, and though he remained free from pain, I was fearful he might not rest well. To secure this I injected another grain of morphine, after that he had no return of the pain and was soon well.

Case 3d.—Aged about 10. This was a severe case of acute Rheumatism affecting chiefly the lower limbs; patient had been sick for several days before I saw him on Oct. 25th, 1860, at eight or nine o'clock A. M. His sufferings at this time were very great. He had been taking Dovers Powders, and volatile Liniment had been applied externally. I immediately injected a grain of acetate of morphine under the skin of the limb most painful. In ten minutes he was perfectly easy. Saw him again in the evening; he had been comfortable through the day, but the pain was returning. I repeated the injection upon the other limb with a like favorable result. On the morning of the 26th, the pain returned. I made another injection which also afforded immediate relief, but as I found in this case the pains returning in ten or twelve hours after the injection, I prescribed morphine and quinine by the mouth, together with extract Cannabis Ind. and Tinct. of Actea. He recovered so that I was able to leave him on the 29th, after five days attendance. This patient has since had attacks of Rheumatism but they have been less severe, so that he has gone through them without medical attendance with the use of such remedies as had previously relieved him.

Case 4th. G. S., aged about 30. I was called in haste to see this patient, March 4, 1861. He had taken Strychnine for the purpose of self-destruction. Owing to the small quantity taken, or more probably to the adulteration of the article, the symptoms did not indicate a fatal result, though he was suffering severely from the peculiar effects of the article. In order to quiet the spasms I undertook to give him Morphine by the mouth, but he would not swallow it.

I then injected a grain of the acetate of morphine under the skin of his arm. He was soon relieved, and out the next day.

Case 5th. Mrs. A. N., of Berlin, aged 36. A large, well developed and ordinarily a very healthy woman, was troubled occasionally for some months with pain in the stomach. Her bowels were costive and liver, torpid. I ordered an aloetic laxative, to be continued daily, with a mixture of Sulp. Ether and Tinct. Lavender Comp. to be taken during the paroxysms. This treatment relieved the patient and prevented recurrence of the attacks for several months. On the morning of the 18th, of April, 1861, just at daylight, I was called in haste to visit her. I found she had been suffering extremely all night from an attack of Gastrodynia—was unable to lie down, owing to the pain being much increased by a recumbent posture. For some time previous to my arrival, there had been frequent vomiting, everything taken into the stomach was thrown off. I had attended this lady several times when in labor, but never saw half as much outward manifestation of suffering as at this time. I immediately injected a grain of acetate of morphine under the skin over the stomach, and in five minutes she was free from suffering. Giving directions for the regulation of the stomach and bowels I left her, and as she was four or five miles from me I did not call again though I heard a few days after that she remained well.

About 1 o'clock, in the morning of the 27th, of the same month, I was called to see her again. She had remained well till the evening previous when after great fatigue from over exertion, the Gastrodynia returned with a severity equal to the previous attack. A repetition of the same remedy relieved her as promptly. More thorough attention was now given to the regulation of the stomach and bowels; caution given respecting food and exercise. Since that, she has been free from pain and enjoyed good health.

Case 6th. A. S., aged about 45, mechanic. This was a case of Neuralgia of one leg in which there were some varicose veins. I made use of the injection the 26th, and 27th, of May, 1861. The effect was not so prompt or the relief so great as in the other cases, though the pain was relieved so much that he was able to resume his labor in a few days.

Case 7th. A. M., aged 65, a feeble, broken down man, with organic disease of the heart of several years standing. Had been

troubled for a day or two with vomiting and diarrhea for which various domestic remedies were used by the family, but as he grew worse, I was called to see him on the night of the 30th, of August, or an early hour on the 31st. I prescribed Opium in pills, and an aromatic infusion, with ammonia, laudanum and brandy. I saw him three times during the day, and was called again in the evening. As the vomiting still continued, though less frequently, I injected less than half a grain of the morphine—doing this rather to satisfy friends, than in accordance with my own judgment of the necessity of the treatment. The friends had neglected sending in season, but after having called advice were not satisfied with ordinary attendance or measures. The vomiting ceased, but he continued to sink, and died about daylight the next morning. I was with him at his death and for two or three hours previous; he was comatose but had not the slow respiration and contracted pupil we expect to see from an over dose of morphine. In my opinion, his death was owing to his old chronic difficulties.

The morphine prescribed was certainly not half what I had used in other cases, and the effect of the opium previously taken, showed that he was not particularly sensitive to the influence of anodynes.

Case 8th. N. P. W., aged 50. This was a case of Rheumatism of the bowels. I was called to him the 20th, of January, 1862. I had attended him in June, 1860, and Nov., 1861. He then had Rheumatism of the limbs, with functional disease of the liver. I could not give him any preparation of opium or morphine, or the Ext. Cannabis Ind., sufficient to relieve his pain, without producing unpleasant symptoms. I now made use of injections of acetate of morphine for several evenings in succession; it quieted him, giving him comfortable rest at night without producing any of those unpleasant secondary effects which it invariably did when introduced into the stomach. I found it necessary to increase the dose from one grain, to one and a fourth, or more. After this course, the alkaline treatment with the use of Ext. Cannabis Ind., and Tinct. Actea, completed the cure.

Case 9th. Mrs. E. P., aged 38. A case of sympathetic vomiting near the close of the eighth month of pregnancy. In a former pregnancy, at the commencement of the ninth month, after being sometime under Homœopathic treatment without improvement, she was

very speedily cured by small doses of kreosote, and pills of morphine and calomel, in minute doses. At this time, March 20th, 1861, these remedies failed entirely, so did the oxalate of cerium, and pills of morphine, and nitrate of silver. I tried injections of acetate of morphine, commencing with doses of half a grain, gradually increasing to one grain, but without any favorable result. I began to think I should have to resort to premature delivery to save my patient, for the vomiting was very frequent and distressing. The patient was much reduced, but at last the vomiting ceased under the use of calomel in doses of the sixteenth of a grain every hour through the day, and less frequently, in the night. She had a natural and easy delivery on the 28th, of April, and a good getting up.

The above cases are a fair exhibition of my experience in the Hypodermic treatment of disease. I have indeed witnessed no failure or unfavorable effect except in one of the cases mentioned above. I am satisfied that the Hypodermic syringe is a valuable auxiliary in the treatment of disease. Indeed I should be unwilling to practice without it. I carry it with me as regularly as I do my lancet, and use it much more frequently.

If the relief from the use of the injection was no more permanent than when the medicine is taken into the stomach its more speedy effect is often a matter of importance to the patient, and is very gratifying to the physician, especially if he is in haste, or anxious to get rest for himself. But in some of the cases, we see that this administration of morphine was *permanent* in the relief which it afforded, the disease not returning after its use.

My doses were larger than those generally used, but they seemed none too large for the cases in which they were employed, unless in case 7th. I have generally weighed the doses with care. In case 7th, I weighed out a grain, but used less than half of it. In most of the cases there was some slight waste.

ARTICLE IX.

THE PLASTIC CONSTITUENTS OF THE BLOOD,

THEIR PHYSIOLOGICAL AND PATHOLOGICAL RELATIONS.

BY LEONARD J. SANFORD, M. D., OF NEW HAVEN.

[*Read before the New Haven County Medical Meeting, April* 10, 1862.]

THE Blood has been well called "a mighty river of life." Its constituents are not numerous, and yet from them the animal body in its variety of tissues is built up; likewise they have to do with the processes of nutrition, secretion and excretion, and the functions of every kind which take place within the animal fabric from the beginning of life to its close.

The body is essentially developed from the *Plastic* constituents of the blood, which are *Albumen* and *Fibrin*—two substances whose range of relation is more extended than that of all the others composing the vital fluid. In the present paper we propose to consider briefly these plastic bodies in the more obvious of their relations.

Albumen and Fibrin are *protein* substances, and are, physically and chemically, almost identical; they exist in healthy blood, the former in the proportion of 80 parts in 1000, the latter in the proportion of 3, in 1000 parts; and their ratios and proportion are similar in all classes of the animal kingdom excepting only the class AVES—the blood of birds containing albumen in the quantity of from 50 to 60 parts, and fibrin, about 2 parts in 1000.

Blood derives its albumen from two sources, viz; first, from nitrogenized animal food, which being received into the stomach is converted into *albuminose*, and passing thence into the Portal vein and liver its transformations are completed—it becomes, chemically, albumen. Second, albumen is furnished to the blood from the lymphatic

system; caused by their exercise, and consequent upon processes of nutrition, the tissues are constantly yielding to the lymphatics, waste material, which, undergoing assimilation in them, becomes *lymph;* and lymph is a highly albuminous fluid—it contains from 5 to 10 per cent. of albumen.

Fibrin, which closely resembles albumen, is, according to Lehmann, Simon and others, a product of the transformation of this substance; it is organized, or rather animalized albumen. Of its mode of occurrence in the blood we can say little. It is contributed to this fluid, we think, mainly by the lymphatics;† the principal argument in support of this opinion is derived from the fact that lymph contains, in 1000 parts, from 30, to 40 parts of fibrin; while in *chyle* (another supposed source) this substance is hardly appreciable to chemical tests. The liquor sanguinis in the ways just mentioned, comes to contain $\frac{80}{1000}$ of albumen, and $\frac{3}{1000}$ of fibrin; these, kept in solution by the salines, constitute the plasma of the blood.

We pass now to notice the relations of the blood plasma to the tissues; these, are two fold. The tissues are built up from the plasma, and they are nourished by it. We make these statements unqualifiedly because, only the plasma, if we except the single instance of the menstrual fluid, is ever found, normally, outside of the blood vessels, and also because the animal tissues are resolvable into fibrin or albumen—for the muscular and fibrous tissues are (chemically) but organized fibrin; the integuments and cartilages are only peculiar expressions of albumen, and even the nervous mass is albumen in union with phosphureted fat.

How is it, secondly, that the tissues are developed from these plastic elements; very little is known on this subject. The microscope teaches us that animal textures, excepting only some membranes, are *cellular*, and ovology furnishes us with a few facts respecting their cells, as follows: An ovum contains in its vitellus, a single nucleated cell; after impregnation the cell enlarges, its nucleus sub-

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† A modern theory, which is accredited by several distinguished Physiologists, assumes that *albuminose*, on entering the radicles of the Portal vein, is immediately changed, by a catalytic transformation, into albumen and fibrin. That such is the source and manner of origin of the albumen of the Blood is not improbable, but to account thus for its fibrin is unwarrantable, for the *lymph* supplies it directly in sufficient amount.

divides into granules, which, increasing in size, cause rupture of the cell wall whereby they are discharged into the surrounding albuminous fluid, and the two, the granules and albumen, are in the relation to each other of *cytoblasts* or cell germs, and *blastema* or formative fluid. Next may be observed forming around each cytoblast, a delicate envelope or cell wall; this, though so thin as to be structureless, is the seat of important changes. The albuminous fluid or blastema now passes, by endosmose, through the walls of the new cells; during its passage it is animalized and probably changed into fibrin; now, it is in contact with the cell nucleus. This body, which is doubtless pervaded by a vital influence, changes and is changed by the fibrinous fluid. In the new cells we shall witness a repetition of what was observed in the original cellule—the nucleus of each separates into granules, which, by rupture of the confining membrane, are scattered throughout the nutrient blastema. In the first instance the granules might have been counted, but in the progress of development they have become 'as the sands upon the sea shore for number.'

Looking again, we discover in the granules a power of affinity, for each selects and unites with the granules which have endowments corresponding with its own. The collections of granules then take to themselves cell walls; now, we have perfect cells possessing various endowments, and they pass through various phases and processes of development till one set has given rise to muscle, another to nerve, another to bone, and so on.

The *Membranes*, or some of them, probably constitute an exception to this form of development; they are elaborated directly from fibrin, the fibrin being coagulated into fibers, and these fibers are so interwoven and blended with each other that a dense homogeneous membranous tissue is formed.

We have thus touched upon the development of the tissues to show how intimate a relation albumen and fibrin sustain to them. For the same purpose, we will glance at the subject of Nutrition.

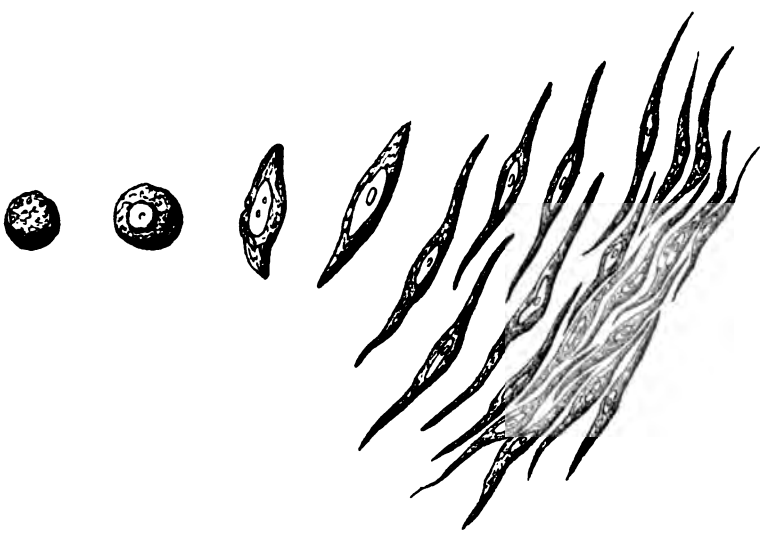
Physiologists affirm, that "as the blood, in circulating through the capillary vessels comes in contact with the tissues, each, yes every molecule of each, selects from it those elements which are fitted to renew its substance." This doubtless is true, but the fact should be stated with explanation to prevent the inference that the nutritive materials of the blood are very various and dissimilar; in

reality, albumen and fibrin are the only tissue making substances which that fluid contains. Its corpuscles are not convertible into tissue, indeed they are never found within the tissues unless vessels are ruptured; its fatty and extractive matters cannot be wrought into any texture and much less its salts. We are thus, by exclusion, compelled to believe that of all the constituents of the blood, only albumen and fibrin can be assimilated into flesh.† The transformations which must take place in order to this result are accomplished solely by the influence of an endowing force which is inherent and peculiar in every animal structure, and in the processes of nutrition the nature of each is impressed upon the plasma as it is absorbed; it is then, and thereby, metamorphosed into the material and texture of the several tissues. And now, in one word, if the tissues are originally built up from the substances under consideration, we are bound to conclude that they are nourished and preserved by them —for, what elements *can* renew any tissue but those which formed it?

Next, it will be interesting to notice the relations of the blood plasma to reparatory processes consequent upon inflammation and other injuries. In all such cases, if there has been loss of substance, we shall observe first an afflux of blood to the part, and then an influx of its plasma where the tissue is deficient. The effused plasma is called by Paget and other Pathologists, *Lymph*, coagulable lymph. It is so designated because, while passing out of the vessels the albuminoid elements become fibrinous and are then in a state to be coagulated or fibrilated into fibers. This process of fibrilation takes place by cell agency, indeed the new fibers are only cells which are very much elongated, in union with each other by their extremities (see Illustration on page 191). These fibers then unite laterally and diagonally forming an embryo tissue which becomes consolidated and completed by processes which the nuclei of the fiber cells give rise to. The tissue thus produced is variously called *fibrous*, *fibro-*

† The above statements may seem too exclusive to those who have been accustomed to regard nutrition as an *Alimentary* question merely. But it should be remembered that it is the *blood* and not aliments which accomplishes the nutrition of the animal body; and however various and numerous the latter may be in kind—whether ternary or quarternary, organic or inorganic—they must all be elaborated into the plastic constituents, albumen and fibrin, before they can become nutritive.

cellular or connective tissue, and it is this which is commonly formed, whatever be the tissue upon which the lymph is poured out, whether containing cellular tissue in its natural structure or not. This, therefore, we may regard as the common or general tendency of lymph; but in certain cases its development passes beyond this form or deviates from it in a different direction in adaptation to the special character of the part to be repaired. Thus, for the repair of bone, the lymph may proceed a certain distance towards the development of fibrous tissue as if for a common healing and may then ossify, or not forming fibers at all it may develop into a nearly perfect cartilage and this may ossify. In general, however, the character of the connective tissue which is formed in repair is adapted to that of the parts it unites; thus the bond for the union of a tendon is much tougher than a common scar in the skin, and the scar in the skin is tougher and less pliant than that in mucous membrane.



Lymph cells showing phases of development from Corpuscles to Fiber Cells‡—magnified 500 diameters.

Connective or fibrous tissue then is the medium which is com-

‡ Copied from Paget's Surg. Pathol., Am. edit., p. 127, with slight modification to accord with the writer's observation with the Microscope.

monly formed for the repair of structure. In the exceptional cases repair takes place by the *granulation* process. The best illustration of this which occurs to us at present is furnished by the healing of an abscess after inflammation has subsided. Looking into an abscess at this time, the observer will notice that cells upon cells of a round or oval form, nucleated and filled with granules, are heaped together in a layer of from half a line to two lines in thickness, without apparent order and connected by very little intermediate substance. Singly, they are colorless, but in clusters, ruddy, even independent of the blood vessels. In granulations which are making healthy progress, one can conveniently trace the cells in various stages of development according to the position they occupy. The deeper seated are always most advanced and often are so much elongated as to be nearly filamentous, while the superficial are still in a rudimental state, and if near the edges of the granulating surface are acquiring the characteristics of epithelial cells. A true cellular tissue is thus formed in the cavity which inflammation had caused, and it progresses in its development till the new tissue becomes more or less identical with that which it replaces.

In the ways which have now been described does reparation take place in the cases where there has been removal of tissue by inflammation or other injury. It is obvious that the materials of repair are albumen and fibrin.

It remains for us to glance at, and we cannot do more, *the relations of the blood plasma to states of disease and to pathological formations.* The constituents of the plasma, albumen and fibrin, are contained in the blood, normally, as has been stated, in the proportion of 80, of the former, and 3, of the latter, in 1000 parts. In most instances of disease, according to Andral and Gavarret, they exist in the blood either in greater or less proportion than this, but no particular increase or deficiency is characteristic of any disease. In fevers generally, and in inflammations invariably, both are in excess, the excess sometimes being as great as 100 pr. ct. In fevers of a purely adynamic type, in dropsies, and in most if not all diseases attended with defective nutrition and wasting, there is a deficiency of both. Whether these changes in the amount of albumen and fibrin in the blood are the cause, or consequence of disease, cannot be answered positively. But we believe that disease holds both re-

lations to these constituents. We think there is evidence that they cause it furnished by Bright's disease of the kidney. A plasma abnormally rich in albumen is associated with this disease, and doubtless it is this which gives rise to the intercurrent inflammations of the serous and fibrous membranes which are so apt to follow this kidney affection. Also we think that an excess of this element in the blood is proximately the cause of the disease itself; we believe it because it exists before any local manifestations of the affection are apparent. Again, in nearly all dynamic fevers, and in some adynamic, we frequently have intercurrent inflammations; preceding these, and we will say causing them, is a redundancy of albumen in the circulating fluid. We are forced to believe that an excess of this element is the *causa sine qua non* of such inflammations because the plasma of the blood is *always* the food of inflammation—it is to it, what fuel is to fire.

We are unable to show so conclusively that disease begets a superabundance of the constituents of plasma; all we can say on this point is, that in many of the diseases in which they are excessive, the nutritive function, in consequence of the disease, does not go on 'pari passu' with that of absorption by the lymphatics; the latter is the most energetic, consequently the blood comes to contain an excess of albumen and fibrin.

It would be easy to show that a *deficiency* of the plastic elements is in some cases the cause, and in others the consequence of disease. Obviously, in the first instance, the body not being adequately nourished, necessarily becomes subject to it; and in the second, in which disease causes the deficiency, it does so by interfering either with the blood making functions, or absorption by the lymphatics, or both.

Passing from this consideration of the general relations of albumen and fibrin to disease, we will, in conclusion, notice them in their occurrence as *exudations* in inflammatory and other pathological states. Nothing is more common, as a result of inflammation, than an effusion of the blood plasma—it is one of natures methods of relieving the congested vessels. This effusion alike takes place on the surface and in the substance of tissues. In the former case, and especially in the so-called diphtheritic inflammations, it usually exudes rapidly and in considerable quantity, but when occurring in the paren-

chyma of organs it oozes from the blood vessels quite slowly. The lymph thus deposited is disposed of in various ways. If it is thin and limpid, the absorbents may take it up again. If it is not reabsorbed and is exposed to the air, as when on mucous membranes it usually degenerates into *pus;* in this instance the fibrinous elements become converted into the corpuscular, and these can only form purulent matter. On a serous surface, if the lymph is of good quality and inflammation is not excessive, it may develop into a sort of mongrel tissue which is called *false* membrane. But when the exudation is in the parenchyma of an organ it neither undergoes organization nor is, ordinarily, resolved into pus; it remains essentially in the state it was deposited, blocks up the organ and arrests its function. In proof of this, we have only to observe the textural changes which take place in Bright's disease of the kidney, or in the waxy degeneration of the liver, or in cirrhosis, or in that obstruction of the mesenteric glands called tabes mesenterica. Let us note the results of the lymphous or albuminous deposit in Bright's kidney. Soon after the disease commences, the capillaries of the cortical portion of the kidney are seen to be congested; then, minute particles of albumen, which are apparently coagulated, begin to be observable in the cortical layer; they gradually become more abundant till in the course of a few weeks, or months, the secreting portion of the organ is filled with them; to the touch, the cortical surface feels granular or nodulated and of diminished consistence. If the patient lives to this time, which he seldom does, inflammation, either acute or chronic supervenes, and speedily destroys life. This form of albuminous exudation is not as rare, we think, as medical men are inclined to believe; certainly it takes place sometimes in diseases of the liver and lymphatic glands, and there is reason to believe that it may and does occur, in greater or less degree, in all the visceral organs as a result of chronic congestion.

From what has now been stated it appears that an excess of albumen in the blood must be removed either by consumption through inflammation, by excretion as in some fevers, or, by exudation; and in the case of exudation, it is disposed of in the various ways we have just described.

One form of albuminous deposit, an exudation, remains to be mentioned.

Lymph is sometimes excreted from the blood vessels under circumstances which compel its development into *tumors*, or constituents of tumors. The exudation in these cases is due, generally, to a morbid state of the parts at, or adjacent to, the place of exudation. The plasma which is effused, first becomes cellular, then fibrilates, and ultimately develops into fibro-cellular tissue; a tumor may be altogether, or only partially, thus constituted; in the latter case the fibers form the basis structure of the tumor—they are its skeleton. Fibrous tissue then, developed from albuminous material, exists in greater or less abundance in all tumors—in all that are benign, and in all that are of questionable character, from *Keloid* down to *Cancer*.

ARTICLE X.

THE SYMPATHETIC NERVE.

BY N. GREGORY HALL, M. D., OF VERNON.

[*Read before the Tolland County Meeting, April* 17, 1862.]

THE first question which seemed to have entered the minds of the older writers upon the Sympathetic nerve was, what is its origin? And it appears by their writings, that to settle this question satisfactorily, was a matter of great importance. Hence they examined its connections minutely, bringing to the investigation all the light and knowledge they possessed of the nervous system in its distribution and functions. But notwithstanding the carefulness of their researches, the solution of the question still remained in the deepest obscurity. Therefore, as is always the case when truth cannot be arrived at, they adopted fanciful and extravagant notions. Some supposed that a few delicate filaments found concealed in the carotid canal, upon and in conjunction with the cerebral nerves, were the origin of the Sympathetic. Anatomists had deduced the Sympathetic from the sixth cerebral pair only before the time of Meckel, who traced out the Vidian nerve and disclosed a branch running deeply in the carotid canal. Since then it has been described as having a double origin or two roots, viz, from the fifth and sixth cerebral nerves; and until within a recent period this description has been held by the schools as the correct one: This however instead of being its origin is now known as only a mode in which branches proceeding from the uppermost cervical ganglia ascend towards the head. Such are a few of the many opinions entertained by the early writers upon the origin of the Sympathetic nerve. It has been reserved for a later day to disclose the erroneous conclusions at which they arrived, and also their error in investigating so closely and bestowing so much time and thought upon a subject of so little practical importance; a useful lesson certainly for

those who theorize too much and spend time in searching out proof to substantiate dogmas rather than in seeking after truths of practical value.

The views which are at present held in regard to the anatomical relations of the Sympathetic nerve are the following: It consists of a series of ganglia which are situated on either side of the vertebral column; they communicate with all the other nerves of the body and distribute branches to all the viscera and internal organs. The communication of the Sympathetic with the other nerves takes place immediately at their exit from the cranium and vertebral column. There are however a few exceptions, thus with the fourth and sixth cranial, it unites in the cavernous sinus, and with the olfactory, optic and auditory, the union is at their ultimate expansions. The distributing branches accompany the arteries supplying the different organs, forming around them communications called plexuses, which take the name of the artery they are associated with—hence the hepatic, cardiac and splenic plexuses. They partially supply all the internal organs of the head, neck and trunk, and some of them exclusively. For this reason the Sympathetic is considered a nerve of organic life and is sometimes called *trisplanchnic.* It has also received the name of *ganglionic* nerve, and for two reasons, first, from the fact of its being formed of a number of minute ganglia, and second, from the continual disposition it evinces in its distribution to form by communications small knots or ganglia. These ganglia are distributed as follows, viz: There are five in the head,—the ganglion of Ribes, also known as the ciliary or lenticular; the spheno-palatine or Meckel's; the otic or Arnold's, and the submaxillary. There are three in the neck, called superior, middle and inferior; and twelve in the dorsal; four in the lumbar, and four or five in the sacral region. Each ganglion is now considered as a distinct center, giving off branches in four different directions, viz; superior or ascending, to communicate with the ganglion above; inferior or descending, to communicate with the ganglion below; external, to communicate with a spinal nerve, and internal, to communicate with the sympathetic filament of the opposite side and to be distributed to the viscera. Of the cranial ganglia the older writers seem to have had no correct, and many of them, not any knowledge at all. In fact it is not until within a recent period comparatively, that all of them

have been discovered; the otic or Arnold's is, I think, the latest, that having been discovered in 1828. The ganglion of Ribes, the first of those in the head, is situated upon the anterior communicating artery. Its formation is the union of the Sympathetic filaments accompanying the ramifications of the two anterior cerebral arteries; these filaments are derived from the carotid plexuses of each side, and it is by means of them that this ganglion is brought into connection with the carotid plexus and also with other Sympathetic ganglia. This ganglion though small, is one of interest as being the highest point of union between the Sympathetic chains of opposite sides of the body. The second or ciliary, is small, quadrangular and flattened, it is situated within the orbit between the optic nerve and the external rectus muscle and is enveloped in adipose tissue. The third, or spheno-palatine or Meckel's ganglion is the largest of the cranial ganglia, it however varies much in its size; it is situated in the spheno-maxillary fossa. The fourth, which is the otic or Arnold's is small, oval and flattened, and is situated immediately below the foramen ovale against the inferior maxillary nerve; internally it rests against the cartilage of the eustachian tube and tensor palati muscle; posteriorly it is in contact with the arteria meningea media. The fifth and last of the cranial ganglia, the submaxillary, is small and sometimes triangular in form; it lies upon the gland from which it takes its name, in close relation with the gustatory nerve and near the posterior border of the mylo-hyoideus muscle.

We next come to the carotid plexus, a brief examination of which is here demanded. This plexus is formed by the ascending branch of the superior cervical ganglion which enters the carotid canal in company with the internal carotid artery and divides into two branches which form with each other and with filaments derived from the petrosal branch of the vidian, loops of communication around the artery. The continuation of this plexus onwards with the artery by the side of the sella turcica is called the cavernous plexus. The carotid plexus forms the center of communication between the cranial ganglia. It also communicates with most of the cranial nerves and distributes filaments which accompany the branches of the internal carotid in all their ramifications. Besides the communication which this plexus has with the carotid ganglion it has com-

munication with the third nerve in the cavernous sinus, and also with the fourth in the formation of the nerve of the tentorium; with the Casserian ganglion; with the ophthalmic division of the fifth in the cavernous sinus by means of the ciliary ganglion; and with the superior maxillary through the spheno-palatine ganglion. To the sixth nerve it sends two branches directly which unite with it as it crosses the cavernous sinus; through the medium of the petrosal branch of the Vidian, it communicates with the facial and auditory nerves; and by means of two filaments to the tympanic nerve, with the glosso-pharyngeal.

The Cervical ganglia next demand our attention, concerning which a few words only need be said. They are three in number—superior, middle and inferior. The superior is long, fusiform, of considerable thickness, smooth and of grayish color, it extends from within an inch of the carotid foramen in the petrous portion of the temporal bone to opposite the lower border of the third cervical vertebra. The middle is small, and sometimes wanting; it is situated opposite the fifth cervical vertebra and rests upon the inferior thyroid artery. The inferior cervical ganglion is of much greater size than the preceding and is always present; it is semilunar in form and is situated upon the base of the transverse process of the seventh cervical vertebra immediately behind the vertebral artery; hence its title to the designation *vertebral ganglion.*

The next in order are the Thoracic ganglia, which are twelve in number on each side; they are flattened and triangular in form and exhibit the peculiar gray color and pearl lustre which is characteristic of all the Sympathetic ganglia; they are situated on the heads of the ribs and are covered by the pleura costalis; the first two and the last, are commonly the largest. Formed from them is the semilunar ganglion or solar plexus, from which we have derived the phrenic, gastric, hepatic, splenic, supra-renal, renal and superior and inferior mesenteric plexuses.

The Lumbar ganglia are four in number on each side—in color and shape they are similar to the thoracic; their position is upon the anterior part of the bodies of the lumbar vertebræ. An important plexus, the hypogastric, is formed partially from these ganglia.

The last, are the Sacral ganglia of which there are four or five on each side; their situation is upon the sacrum near the anterior sacral

foramina; in size they are smaller than the lumbar, but resemble them in form and mode of connection. Such are the anatomical relations of that collection of scattered but mutually connected ganglia and nerves called the Sympathetic.

To a correct understanding, however, of the physiology of this portion of the nervous system a different arrangement is preferable—a division into *three* groups, viz; first, those more detached ganglia and nerves which are contiguous to the viscera; they seem indeed to be the chief centers of the system; they form the cardiac, solar and hypogastric plexuses. The second, includes that double chain of ganglia united by cords which lie in front of the vertebral column; these communicate with the plexuses of the first group, and also with the spinal nerves. By some, in this division are placed the five cranial ganglia of which previous mention has been made, which is probably correct. The third group comprises the ganglia on the posterior roots of the spinal nerves, and also includes the Casserian ganglion of the fifth pair and the ganglia which are upon the pneumogastric and glosso-pharyngeal nerves.

A few words respecting the composition of the trunks of the Sympathetic nerve are here proper as introductory to a notice of their distribution. They are made up of two different orders of fibers, one having their central terminus in the vesicular matter of the sympathetic ganglia themselves, the other derived from the cerebro-spinal system; the former are of the gelatinous kind, they are most abundant in the visceral system but may be traced through the spinal nerves to the ganglia on their posterior roots where the fibers intermingle: The latter are tubular, being derived from cords of communication which originate in the medulla spinalis and pass through the prævertebral ganglia into the sympathetic without apparent change; they are commonly termed roots but are really bands, commissural, bringing the two systems into communication. Hence it is plain that the cerebro-spinal and sympathetic systems interpenetrate one another, each having its own series of ganglionic centers and trunks connected with them, but each system transmitting its fibers into the trunks of the other so as to be peripherally distributed with their ramifications.

Only a brief statement of the distribution of the principal trunks and branches of the Sympathetic system can here be given.

Those of the cardiac ganglion or plexus proceed chiefly to the heart and large blood vessels; from them, after being reinforced by branches from other subdivisions they continue on and form almost numberless minute ganglia along the ramifications of the vascular system throughout the whole body, clasping the vessels as the tendril of the vine clasps whatever it reaches. Those of the solar plexus supply in part the muscular walls of the alimentary canal from the stomach to the end of the colon, and in part the main branches of the aorta; thence following the vessels they pass to the liver, spleen, pancreas and kidneys, also to the testes in the male, and to the ovaries in the female. Those of the hypogastric, are transmitted to the muscular walls of the pelvic viscera, and to the blood vessels.

The branches of the ganglia of the trunk of the prævertebral contribute most in the formation of the above plexuses. The exceptions to this, are those furnishing largely the carotid artery, forming a plexus around it; also branches inosculating with those of the pneumogastric to form the pharyngeal, laryngeal and pulmonary plexuses. Of the cranial ganglia, the ophthalmic distributes branches to the iris, through which it contracts, also to the vascular apparatus of the eye ball and ciliary processes. The otic, communicates with the inferior maxillary and glosso-pharyngeal, nerves, but distributes most of its branches to the tensor tympani and circumflex palati muscles, operating through them upon the sense of hearing in the same way that the ophthalmic does on vision. The spheno-palatine communicates with the fifth and facial and ministers to the sense of smell and taste, being distributed to the mucus membrane of the nasal cavity and palate. The submaxillary is chiefly connected with the fifth pair, and most of its branches are transmitted to the gland of the same name. The fibers arising from the ganglia on the posterior roots of the spinal nerves accompany the latter to some extent in their distribution; others enter the cord, passing upon its blood vessels.

It now remains, the description of the anatomical relations and the distribution of the principal trunks and branches of the Sympathetic nerve having been given, to speak of its functions.

And under this head we might adduce many of the theories propounded by the older writers which are most amusing and interesting but as we think highly erroneous, and show by contrast their

errors; but time will not permit, and besides, it is perhaps not the part of wisdom to criticise too severely the ancient authors, for if the progress of discovery in the science of Medicine should be as great during the next two centuries as it has been in the last two, theories which we now hold to be as true as the existence of truth itself will be regarded by those who shall follow us in the same manner that we regard the dogmas of the ancients! I will only cite one or two of these early theories. Willis says, "this nerve is the medium of communication between the connections of the brain and the affections of the præcordia, and also between the actions and suffering passions of nearly all the parts of the body of the involuntary class. The nodes the ganglia possess are similar to those on the trunk of a shrubby tree which serve as a diverticulum to the spirits." Lancisius, compared the ganglia with the heart, and described them as little nervous hearts intended to assist in the movement of the nervous fluid.

From the anatomical relations of the sympathetic nerve we see that a large portion of muscular apparatus ministering directly to organic life—that of the alimentary canal, glands, ducts, &c., and also the blood vessels—receive no other supply; therefore whatever motor influence these parts may receive through mental states or indirect excitation, must be in virtue of this system of nerves. It is a remarkable fact however, that those organs which are most freely supplied with nerves from the cerebro-spinal system, most clearly exhibit the influence of the Sympathetic both in their respondence to emotional states and in their sympathy with other organs when their functions are disturbed. This is often seen in the functional derangements of the heart, stomach, and especially of those of the various secreting glands; hence it is that the influence of mental emotion upon the functions of secretion may be excited through the nerves of the cerebro-spinal system as well as through the Sympathetic. The ability of parts supplied solely by this system to transmit sensory impressions to the brain, must be in virtue of the connections of the Sympathetic with the cerebro-spinal nerves. Those parts however, do not ordinarily transmit impressions to the encephalon, but in certain morbid states their sensibility is acutely manifested and impressions are made and felt remotely from the suffering organ. By the elaborate researches of Prof. Valetine, Dr.

John Reid, Dr. Waller and others, it has been clearly proved that contractions of the various muscular parts supplied by the three great visceral plexuses may be produced by irritating either the præ-vertebral ganglia or the cords which connect them with the spinal nerves; from their investigations then, we infer that the fibers which enter a sympathetic nerve from any part of the cerebro-spinal axis are unaffected by contact with its filaments and so they will excite the organ to which they are distributed as effectually when irritated where they originate, as along the course of the Sympathetic trunk through which they pass.

The question now arises how can the muscular apparatus of organic life be acted upon by states of mind? This cannot be accomplished by any power of the will, however strong that may be in controlling other actions; it is affected by emotional states, or by fixing the attention upon whatever the mind expects. The effect of emotion is very strikingly illustrated in the case of the heart, hence it has been called by almost all nations the seat of feeling; expectant attention also has as great a power or influence upon the heart as emotions, and without doubt the movements of the lower part of the alimentary canal are affected in the same manner—in this way we account for the action of bread pills and other suppositious purgatives in unloading the bowels.

The nerve force which animates the Sympathetic is undoubtedly peculiar, but the nature of its peculiarities is not known. Some of its manifestations are through reflex actions or, in a word, they are reflex-motor; others are apparent in the continuance of many chemico-vital processes which are interrupted when its integrity is disturbed. The first class of actions is probably dependent mainly upon the spinal cord, and take place through those fibers which connect the Sympathetic with the cord. The second originate, we think, in the ganglia of the Sympathetic; to these therefore the ganglia are nerve centers—whether they are such independently of the cord we are unable to say, but even if they are re-enforced from it, the nervous fluid received is so much specialized by the ganglia that it is as peculiar as though it originated in them—it is correct then to say that the ganglia preside over the chemico-vital processes concerned in the functions of nutrition, secretion, &c.

Another service which the Sympathetic renders, is that of harmonizing the functions of the visceral organs; they take place at the right time and in the right succession by virtue of the sympathy which subsists between the several organs. Also, and lastly, the Sympathetic is a medium through which mental impressions affect the body; in illustration of this, many interesting and instructive instances might be given, but a few must suffice.

We see it most strikingly manifested in the influence of particular states of mind in exciting, modifying, or entirely suspending various secretions; the lachrymal secretion, formed only in sufficient quantity for the wants of the eye, is, under violent emotions, either largely increased or checked altogether; so also a superabundance of saliva is caused by the smell, taste and sight of food—hence the well known test in India of discovering a thief by compelling suspected persons to hold rice in the mouth—that of the thief will remain dry. In the case of the gastric juice, cheerfulness exercises a beneficial influence upon its secretion both as to quantity and quality. The same is true of the other secretions; and not only do mental influences modify the functions of nutrition and secretion but they affect equally, favorably or unfavorably, states of disease—a fixed belief on the part of an individual that he has a mortal disease is often the cause of a fatal result.

Throughout the entire animal economy there is perfect harmony; nature does no bungling work. But in no part of the whole system do we find so much beauty and harmony manifested as is displayed in so beautifully arranging the nervous system to meet the varied wants of human existence. In this certainly we see the wisdom and beneficence of the great Creator.

ARTICLE XI.

DIPHTHERIA.

BY G. B. HAWLEY, M. D., OF HARTFORD.

[*Read before the Hartford County Medical Meeting, April* 24, 1862.]

THE name *Diphtheria* or *Diphtheritis* is derived from the Greek διφθερα, signifying a membrane or pellicle—it was originally suggested by the leathery ash-colored exudation which is present in all cases of the disease, and is its most distinguishing sign. The disease now known as diphtheria has prevailed in various parts of the world, from time immemorial. It was recognized and chronicled by Aretaus so long ago as the second century, and from his time to our own, it has been described in almost every age and country of the world. Though so much has been written about this disease we yet know comparatively little concerning its cause and the influences which regulate its progress—like the wind, it bloweth when and where it listeth, springing up without any recognizable cause, lurking in the same vicinity for a period of years and then disappearing to again reäppear in any situation where circumstances favorable to its development may exist.

Within the past four years, diphtheria has been unusually prevalent. In 1858 and 9, it made its appearance in England, Scotland and in many parts of the United States, especially in New York, Massachusetts and Connecticut, prevailing both as an epidemic and sporadically. Some of the cases were mild and yielded readily to treatment, while others were unmanageable and terminated fatally.

In the beginning of 1859, the disease appeared in Hartford and vicinity; in Wethersfield, where there had been sporadic cases since 1852, the epidemic was severe. It has prevailed in Bloomfield to a

greater extent than in any other town in proportion to its inhabitants, and many of the cases terminated fatally. In Hartford, some of the cases were very mild, others were most malignant and fatal. Some patients died in a few hours, others continued for weeks, and nearly all presented great fickleness of symptoms—so sudden and severe were the changes in some cases that the patient would pass from a condition of apparent convalescence to one of extreme danger in a few hours. In most instances, the disease continues from five to ten days before it abates or proves fatal, but in many cases it presents a great variety of symptoms and continues for weeks lingering in great uncertainty as to the final result.

Diphtheria is ushered in with more or less febrile action, marked by hot skin, rapid and easily compressed pulse, there being no force of circulation, and anorexia, with great depression of the whole system. The fever generally passes off in twenty-four hours. When the patient is first attacked, before the general symptoms are fully developed, the uvula and tonsils present a bright red appearance; they are not painful, neither do they produce any suffering in deglutition, not even sufficient to attract the attention of the patient or his friends. When called to a case of diphtheria we should not be deceived by the patient declaring that his throat is not in the least sore, and thus be led to make a wrong diagnosis: A careful examination will show the pharynx, tonsils and soft palate presenting a bright red and shining appearance; the small vessels are not distinctly injected, but the whole surface has a scarlet look, appearing as if it had been brightly painted and varnished.

After this redness has continued for a few hours, the uvula and tonsils are slightly swollen; after twelve or twenty-four hours from the commencement of the attack, a patch of peculiar whiteness appears on one or both of the tonsils. In some cases these spots are yellow, gray or brown, and are suggestive of sloughs, but they are not of the character of gangrene; they appear depressed from the swelling of surrounding parts. The swelling of the tonsils and pharynx increases, and the whole of the disease seems confined to the throat.

In other cases the inflammation and exudation appear in the trachea producing diphtheritic croup, or they extend to the nasal passages, or to the cavity of the mouth.

When the disease extends to the trachea it is very apt to prove fatal, the patient dying in from twelve to twenty-four hours. In some of the cases, when first called we find all the symptoms of croup and unhesitatingly pronounce it such; especially are the two diseases alike in their respiration—they cannot be distinguished by this means. The effect of certain remedies however is quite different in diphtheria from what it is in croup—thus emetics easily produce emesis in the former disease, while the reverse is true in the latter. When diphtheria extends to the nasal passages it has many symptoms in common with scarlet fever; the fœtid exudation flows from the nostrils excoriating the skin wherever it touches; the respiration is performed entirely by the mouth, and the peculiar scarlet fever effluvia is strongly marked, and without special examination the case would readily be pronounced scarlet fever.

Although the diphtheritic patches in the throat characterize the disease, yet they do not (the writer thinks) always accompany even fatal cases. I have seen the disease prove fatal after lasting several weeks, during which there was no formation of membrane whatever. There is great variation in the symptoms of the disease in different localities, and the range is considerable in the same locality. It may prove fatal in a few hours, or it may continue for weeks, at times presenting the appearance of convalescence, and again assuming the most dangerous symptoms; it is impossible at the commencement of the disease to form any reliable opinion in regard to its duration or termination. Whatever form it may assume, its first development is usually in the throat; as it advances, the whole system becomes inoculated by the poisonous secretion of the false membrane, and as a result the vital forces are depressed and paralyzed. In some cases the patient is so completely overwhelmed that death ensues soon and suddenly, in others the poisoning is less severe and the case may continue for weeks with variable results. Two or three weeks after the throat affection has disappeared, paralysis may supervene. The urine presents nothing decided in its character. In some cases it has been reported albuminous, in others no tests can discover a trace.

When diphtheria prevails as an epidemic, all diseases of the throat are prone to assume a more or less diphtheritic character, and are falsely called diphtheria.

In three cases of the disease in a family of four children, which came under the writer's notice, several points of interest were exhibited, as follows. In the first, a girl of six years having strongly marked symptoms, the disease continued with all its uncertain changes for five weeks when she became convalescent; after improving for eight weeks or until her general health was nearly restored she was again attacked by the disease which extended to the nasal passages and proved fatal. The other children were exposed in the first attack, but were immediately removed from all communication with the patient. In ten days from the time of exposure, a second child, a girl of four years, exhibited the premonitory symptoms; on the next morning the tonsils presented a slightly reddish appearance; in a few hours diphtheritic patches appeared on the tonsils, all the symptoms were aggravated and the whole system was rapidly becoming affected by the poison of the disease. Prompt applications to the tonsils with a vigorous use of general remedies produced a most salutary effect, checking the working of the poisonous matter and gradually overcoming all the symptoms. In four weeks the child had recovered.

The third child, aged two years, was exposed to the disease by the sickness of the second; in ten days thereafter, during which he had been kept away from his brother, he sickened, having the same symptoms but with greater severity; the exudation also was more abundant and persistent. Treatment in the use of local and general remedies was vigorously pursued, and the little patient got well.

In this case, the disease was entirely subdued in twelve hours, and there was no return of the symptoms.

The first case referred to above, answers affirmatively the question of liability to second attacks of diphtheria; in regard to this however, I have no doubt that a first attack secures the system against recurrences except in isolated cases, the same as does scarlet fever.

The above cases also show the importance of early and decided treatment. If remedies are used vigorously before the vital powers are seriously impaired by the poisonous secretion the secreting membrane will change its unhealthy action and the poisonous elements will be neutralized.

Diphtheria is propagated in the way of *contagion*—this is acknowledged by nearly all who have observed it. The proof of its *infection*,

by which I mean its power of being conveyed from one person to another through the atmosphere, is not so decided, though when it prevails epidemically, an influence seems to exist in the atmosphere sufficient to excite it in those who are predisposed through age or debility. This disease selects most of its victims from children under ten years of age; nursing babes are less prone to it than older children. A mother or nurse can watch night and day at the bedside of a child sick with diphtheria without ordinarily contracting it, showing that there is a greater immunity in the case of adults.

The *diagnosis* of diphtheria is easy: The diseases with which the practitioner is most liable to confound it are tonsilitis, acute pharyngitis, croup and scarlet fever. The peculiar red, varnished appearance and slight amount of swelling and soreness with the characteristic diphtheritic patches will distinguish it from tonsilitis or pharyngitis. To discriminate between diphtheria and croup, is of vital importance, and is not ordinarily difficult; the appearance of the throat is a sufficient guide even when the disease is chiefly situated in the trachea, also some of the symptoms proceeding from the latter are quite different from those of the former, and they follow the exudation more promptly. With our present knowledge, it is inexcusable to confound this disease with scarlet fever: They are both almost peculiar to children and have a greater or less amount of pharyngial inflammation, but there are points of difference sufficiently distinctive to admit of discrimination, thus in diphtheria the tonsils and pharynx, at the beginning, are red and slightly swollen without pain; in scarlet fever they are red, more swollen and painful; also there is a less degree of heat and fever, and it does not present that peculiar burning and tingling sensation so characteristic of scarlet fever. The diphtheritic exudation too appears earlier and it is more extensive than that of scarlet fever. The tongue has a white, thick coat in diphtheria, and does not present the red shining elongated papillæ so characteristic of scarlatina.

As we have already stated, the disease under consideration presents great variation in the severity of its symptoms, some cases being mild and easily managed—and they are as often epidemic as sporadic cases—while others exhibit symptoms which are persistent and defy all treatment. Notwithstanding this variation in the symptoms, the cases are all marked with the peculiar ash-colored patches.

The *treatment* of diphtheria is conducted on the same general plan wherever the disease is met with. Local applications are required to destroy the poisonous exudation and prevent the further secretion of it, and general medication of a bracing character is needed for the removal of bodily languor and weakness. The success of the treatment, both local and general, is greatly dependent on its early application. The writer's plan is somewhat as follows:

To the fauces, tonsils, and uvula he applies a solution of nitrate of silver of the strength of one drachm, to the ounce of water; this application should be repeated once or twice in the twenty-four hours according to the severity of the disease. Objection has been made by some, to caustic applications, on the ground that they maintain a congested state of the vessels which gives rise to further exudation, but according to my experience these objections are groundless. There are many other remedies employed locally in this disease which have their advocates and merits; the more important of them are, the muriated tincture of iron which is applied of full strength; chlorate of potash in a saturated solution—grs. xiii to the ounce of water—also chloride of lime, chlorinated soda and chloride of sodium are all much employed; alum, borax and turpentine are also recommended.

These local applications should be persisted in until the patches are destroyed and the tendency to their renewal is overcome; the best way of using them is by means of a camel's hair brush of large size. The inhalation of steam has been successfully used by Dr. Lawrence of North Adams.

In the treatment of diphtheria no reducing remedies should be administered. The various preparations of mercury are not indicated, neither does its alterative effect, so important in the treatment of many diseases, avail anything. The bowels should be exonerated of all accumulation by some gentle laxative which should be repeated as occasion requires. The various compounds of chlorine are highly recommended by most practitioners, and especially the chlorate of potash which should be given to adults in doses of ten grains at intervals of three or four hours—and to children in less quantity, the doses being proportioned to their ages. The chlorine mixture, prepared according to a formula in Watson's Practice of

Physic, Lecture LXXXVIII, is a valuable preparation.† The muriated tincture of iron is a useful and important medicine and when administered early, is efficacious both as a topical and general remedy. Sulphate of quinine, together with brandy, whiskey, rum, or such other alcoholic stimulants as are most acceptable to the patient, should be freely given as the system becomes depressed by the disease. Carbonate of ammonia and spirits of turpentine are also important remedies for some cases.

There are no known Specifics for diphtheria, but a general tonic and stimulating medication is what we must depend upon in the treatment of most cases.

The food used should be of the most nourishing kind. Beef juice properly prepared furnishes the most concentrated nourishment available and it is very acceptable to the stomach: A convenient and good way of making it is to partially broil a beef steak over a quick fire; when sliced up, which is the next step, blood should follow the knife; season the scraps with pepper and salt and then pour on boiling water in the proportion of a pint and a half to a pound of beef and boil slowly for half an hour. The various jellies and animal broths and most any delicate and nutritious animal food may be allowed. When it is impossible to give a sufficient amount of nourishment by the mouth, nutritive enemata should be employed.

Free ventilation and cleanliness are as indispensable as good nursing and medical attendance; foul air, by vitiating the blood, greatly increases the contagious character and malignancy of the disease; and not only ought the room to be freely ventilated, but the bed clothing should be daily changed and aired both at night and morning.

The daily ablution of the patient's body, if so performed as not to produce prostration, will prove beneficial.

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† The chlorine probably acts as a resolvent upon the fibrin of the blood and so diminishes the tendency to the formation of diphtheritic patches, also it may operate as a disinfectant, cleansing the blood of vitiated elements on which the disease more or less depends.

A REPORT OF

TWO ANOMALOUS CASES OF DISEASE,

BY DAVID CRARY, M.D., OF HARTFORD.

[*Published by request of Hartford County Medical Meeting.*]

Gustavus F. Davis and Ellsworth P. Kazar, whose cases are here reported, were men of steady habits and uniform good health,—both were young and unmarried, and the former possessed a sanguine temperament and weighed 162 pounds; the latter was of a bilious temperament and weighed 125 pounds.

Davis was employed in driving a meat cart; Kazar was a workman at Colt's pistol factory. Though not room-mates they boarded together at Mrs. Hill's, No. 72 Governour street, in the southeast part of the city.

The symptoms of the two cases bear so strong an analogy to each other that the narrative of one is very nearly that of the other.

On Monday, March 17th, Davis took breakfast and dinner as usual and worked through the day. At night, complaining of head ache and of feeling very chilly—as if a severe cold was coming on—he took some composition powders (so called) on going to bed. In the morning his landlady found he had vomited quite a quantity of "yellow looking matter" as she expressed it and a quantity of orange peel, and also that he had had in the course of the night a natural movement of the bowels. He looked purple about the face, especially under his eyes and one leg presented the same appearance; red spots were observed about the face, neck and breast.

Dr. Jackson was immediately called in, who says—"I was called to see Mr. Davis about 8½ A. M., found him extremely restless, tossing from side to side and exclaiming 'I am dying, I am dying, can't you help me.' He seemed at first to recognize me, but delirium soon interrupted consciousness. He repeatedly asked to be 'weighed off,'

referring to his daily practice of weighing meat in the market. The tongue had the appearance of the semi-comatose state of typhus; extremities were cool although not cold, pulse was imperceptible in the radial artery and the eyes were extremely injected and prominent. The skin of the face, thorax, arms, hands, legs and feet was purple, shading in various parts into a deeper hue; upon the face and neck were spots from one to three lines in diameter, circular and somewhat resembling the ordinary blood blister. The tongue was covered with a dark coating and the lips and teeth with sordes of the same hue." He died about 9 o'clock A. M., of same day.

The person laying him out tells me that for some time after death the body continued warm; the side on which he had been lying was purple with here and there irregular spots, some of which were quite dark, though they were unlike those on the face and neck.

None of Mrs. Hill's boarders knew at breakfast time the extent of Davis's sickness. When told at noon that he was dead, Kazar went into the room where the body was laid out; on returning he seemed to be very much agitated and frightened, turning very pale and was scarcely able to stand. He sat down to dinner but ate very little and immediately after went to his work; at 3 o'clock he returned and complained that he felt cold and had frequent chills; he remained in this state until evening when he took some composition powder and went to bed. In the morning it appeared that he had vomited great quantities of very dark matter looking like bile and also had had an evacuation from the bowels, but though this was quite natural in appearance, on my arrival I found the following symptoms: No pulse at the wrist; feet and hands nearly cold; tongue slightly furred and perfectly bloodless—looking very much as it does in the last stages of cholera. His face, hands and arms as far up as the elbows and feet and legs to his knees were covered with patches of extravasated blood of all shapes and from the size of a five cent piece to that of a dollar or larger; on the face there were a number resembling black and blue spots one and two inches in length, looking as though they were caused by the blow of a whip; petechial spots were also scattered more or less over the surface of the body. At this time his mind was perfectly clear and calm; I asked him if he was in pain, and if so, where; he answered that all his pain was in his head over the eyes and that his hands and feet felt cold.

He informed me that when he left the factory the day before, he took a glass of cider-brandy on his way home which made him feel better for a short time, but the chills soon returned and he felt as bad as before.

Drs. Hastings and Jackson now came in. We put him immediately upon the use of quinine, brandy and pepper with hot applications to the extremities, but the system did not react and at about 11 o'clock that morning he died.

The small spots on the face and neck of Davis as seen after death were of a bright scarlet color, of the size of No. B shot and were scattered irregularly over the surface; the small spots on Kazar were not as large nor as bright, but more like the regular petechiæ of typhus fever. Davis was very thirsty, drinking water just before his death, which was not the case with Kazar. The former lived, from the beginning of the attack, about fifteen hours, the latter, twenty-one hours.

REPORT OF A CASE OF

CEREBRO-SPINAL DISEASE,

BY RALPH DEMING, M. D., OF SHARON.

[*Published by request of Litchfield County Medical Meeting.*]

Miss J. B., aged 18 years, presenting symptoms of cerebro-spinal disease, came under my care in December, 1859. She exhibited the usual signs of the scrofulous diathesis, such as a pale and soft skin, flaxen hair, long eyelashes and large blue eyes. Her mother died of phthisis pulmonalis.

The patient was suffering from an anterior curvature of the lumbar spine—over the curvature there was much tenderness; the general symptoms were those of irritability and weakness; appetite was deficient, sleep insufficient and the pulse was frequent, feeble and compressible. I visited her occasionally until April, 1860, making use generally of soothing applications to the spine and administering internally, narcotics, nervines, alteratives and tonics; besides these the patient took occasionally saline baths and careful carriage exercise. She improved, and during the continuance of the treatment the improvement was progressive.

February 15*th*, 1862—I was called to the same patient again; age 20, and unmarried. Ten days before, in riding down a hill, she had been severely jolted. Her condition at this time was that of weakness; appetite was good, bowels regular, pulse 90 in the minute and feeble and there was more than the usual amount of tenderness over the spine in the lumbar region. Prescribed entire rest, the use of tinct. hyoscyamus and tinct. valerian and anæsthetic applications to back.

Feb. 19*th*—Patient greatly prostrated by fever and stomach so irritable that almost everything taken is rejected. Nausea and vomiting

have existed since the 16th, at which time the catamenial discharge appeared; pulse 110, tongue coated and dry, teeth and gums covered with sordes, some headache and great thirst. Ordered powders of carb. soda with elixir of opium to be taken in twenty-five drop doses once in four hours, and brandy *pro re nata*. Also, over the epigastrium a mustard application, to the head and back, ice water, besides stimulating pediluvia.

Feb. 20th—Symptoms are much the same though patient is more restless—in consequence probably of seeing too many visitors; there is intolerance of light and sound, some delirium and morbid wakefulness; gastric sickness and sinking continue; thirst is great; pulse still 110; urine scanty and high colored. Continued the treatment without essential change.

Feb. 21st—Patient has slept some, has no headache and complains that the cold applications are uncomfortable; pulse is 100; tongue coated and dry except near tip which is red and clean; any motion of the spine aggravates the stomach sickness. Continued the treatment of yesterday, only adding laxative enemata.

Feb. 22d—Bowels have moved—contents dark, fluid and fetid; restlessness and prostration are great; there is no abatement of gastric irritability or thirst; pulse 110 and more feeble. Continued the treatment of yesterday with the addition of one drachm of elixir of opium by the bowels.

Feb. 23d—Irritability of stomach increased, slight movements of the spine or pressure over it occasion vomiting; pulse 100; restlessness diminished; thirst and heat of skin augmented; menstruation to this date from 16th, discharge being of very dark color. Employed counter irritation over epigastrium; no change of medicines.

Feb. 24th—Symptoms more decidedly typhoid; delirium more constant and of low and muttering kind; patient inclines to pick nose and to grasp at imaginary objects; there is less heat of skin and restlessness. Ordered for the day, hydrarg. cum creta, soda powders, lemonade, elixir of opium and brandy which the patient has daily preferred to anything else given.

Feb. 25th—Passed a better night; this morning had a severe convulsion caused by blowing the nose, it was succeeded by unconsciousness which lasted through the day; pupils dilated; pulse 110;

urine discharged involuntarily. Applied cold to head and warmth to feet. In the evening, patient had lucid intervals; troubled with illusions of light and sound; no stomach sickness and pulse reduced to 100. Continued cold to head and administered powders of hydrargcum creta with tinct. valerian every four hours.

Feb. 26th—Bowels moved, after which was another convulsion and then, for several hours, constant jactitation and muttering delirium; pulse 120 and very feeble. Gave one drachm of elixir of opium by enema. During the afternoon the patient was still and stupid; in the evening, awake and quiet but with eyes staring, pupils more dilated, vision double and pulse 100. Ordered iodide of potassium and extract of valerian, to be taken in six grain doses once in four hours.

Feb. 27th—Light spasms occur frequently in the muscles of the lower extremities; illusions of light and sound continue; consciousness is more constant; pupils are variable, they respond moderately to the light of a candle; there is no nausea or vomiting though motion of any part of the spinal column occasions pain in the region of the stomach. Treatment of yesterday continued.

Feb. 28th—Is able only to recognize objects which are near at hand; muscular agitation considerable; urine passes away involuntarily and rather copiously; pulse 100. Continued the nervines and stimulants.

March 1st—Patient is more rational and is inclined to converse; motions of the head cause great distress and flushing of the face; the eyes have a fixed stare and vision is double; pulse 110; treatment is by stimulants.

March 2nd—Catamenia still continues; urine is freely and frequently voided; strength is gradually failing, though the patient is conscious and speaks often of her approaching dissolution; pulse 140.

March 3d—After enduring a severe convulsion the patient expired.

NOTES ON A CASE OF

LIGATION OF THE EXTERNAL ILIAC ARTERY,

BY JOHN W. LAWTON, M. D., OF NAUGATUCK.

It is well known how very successful the operation of tying the external Iliac Artery has proved, in the hands of surgeons both of this country and abroad. It is to Mr. Abernethy we are indebted for the first successful operation in 1796, and the history of the successive attempts of that distinguished surgeon, reflects the greatest credit on his firmness and abilities. Up to the year 1815, *twenty-two* operations had been performed, *fifteen* of which had proved successful. Since that time the operation has been frequently repeated, and now has become so common, owing to disease and injury, as to render superfluous any description of it; but I propose to report a case occurring in my own practice which may present some points of interest, particularly in its results.

E. S., in an affray on the evening of Sept. 16th, was stabbed in the right (?) thigh, three or four inches below Poupart's Ligament, the wound, which was inflicted by a long pen-knife blade was upwards and outwards in the line of the inner edge of the adductor longus muscle. He bled to the amount of from twenty to thirty ounces; my friend Dr. Langdon having then arrived, a temporary dressing was applied and the patient was removed to his home, a mile distant. Soon after, I saw him, and as the hemorrhage had been so profuse and had now nearly ceased, we did not deem it best to endanger a recurrence by an examination, and so merely applied a compress and bandage. He reacted well, and the next day was comfortable though weak. We decided to retain the dressing undisturbed and await the result. I saw him at short intervals, for a week. All the symptoms were favorable, until the eleventh day, when he became restless and uneasy; I marked a strong arterial impulse, indicating a hemorrhagic effort. Just as I bent down to examine the wound,

the blood gushed out in a full stream, to the amount of twenty ounces. I removed hastily all the dressings and applied a silk handkerchief as a tourniquet, with a compress, which perfectly controlled the hemorrhage. Dr. Platt, of Waterbury, was sent for as counsel, and later at night, Dr. Charles Hooker, of New Haven. After consultation the wound was thoroughly examined, the clots broken up and warm water injected without exciting hemorrhage. The finger passed into it could detect the pulsation of the femoral artery; the question of operation was now discussed, but the danger of the operation, the risk of secondary hemorrhage, the fact of none at present and the uncertainty as to what artery was wounded, led to a unanimous opinion in favor of postponing an operation and trying the effect of pressure and the curative power of nature by the formation of a clot—we hoped for, more than expected, such a result. A tourniquet was applied with a compress whereby slight but constant pressure was kept up above the wound. This was watched constantly by faithful assistants who were instructed how to increase pressure instantly upon bleeding. The next night but one, he bled to the extent of ten ounces.

October 4th—In the morning he bled a few ounces; at two o'clock P. M., same day, bleeding recurred and again at four P. M., and now, though pressure was constantly made over the groin, blood would jet out at times in fine streams to the height of several inches—the parts were becoming tender and intolerant of pressure.

I sent again for Dr. Hooker, who on arriving advised and performed ligation of the external iliac. The wound was dressed with silver interrupted sutures, adhesive straps and compresses. Three hours after, I saw the patient. He complained of some pain; vomiting was constant from effects of ether—ordered $\frac{1}{6}$ grain doses of morphine to be taken occasionally.

Oct. 6th—Found patient very restless, limb warmer than natural—a feature which was constantly present for weeks—and quite tender; vomiting unchecked. Ordered bismuth and calomel; at night pain was increased and knee swollen.

Oct. 7th—Did not see patient as I was called out of town, but learned that he was more stupid and restless and suffered severe pain; tongue was dry and coated with a brown fur. Ordered milk punch and generous diet; omitted morphine.

Oct. 8th—Found patient in a comatose state; knee exquisitely tender and giving indistinct fluctuation; pulse ranged as usual from 110 to 115. Ordered punch continued, quinine in the quantity of *ten* grs. per day and fomentations to knee; coma evidently not from anodyne as he has taken none for thirty-six hours.

Oct. 9th—Patient is so stupid that he cannot be roused; takes no nourishment; knee distended and tender as before—he seems moribund and I judged he could not live till night.

Oct. 10th—Not hearing of his death I rode up to learn of his condition—to my surprise I found him rational; limb was cool; pulse 80, and very weak. Continued milk punch, with quinine in full doses. At night, pulse was stronger and the symptoms were all good.

Oct. 12th—I found patient had made some further improvement; knee less painful and swollen; wound discharging freely.

From this time he gradually improved. The ligatures came away in the course of a few days except one, which remained nearly four weeks.

During this period of convalescence there appeared a swelling at the angle of the lower jaw, on the right side, which increased very rapidly, involving the whole side of the face and neck and extending down upon the chest. This gradually disappeared, leaving a large abscess which on being opened discharged nearly ½ pint of pus and sloughs of the Parotid gland—it continued discharging for a number of weeks and then healed up. The *knee* then grew worse and became exquisitely tender from inflammation, also indistinct fluctuation was ascertained. No benefit seemed to result from any applications though they were most faithfully made and so I had him removed, Dec. 10th, to the Hospital at New Haven to be under the care of Dr. Chas. Hooker.

Since that time the history of the case affords nothing of interest. The patient has improved in general condition but the knee, so far, remains flexed and anchylosed.

ARTICLE XII.

THE MEDICAL PROFESSION—

ITS DIGNITY AND GRANDEUR:

Being the Annual Address delivered before the Convention, May 28th, 1863.†

By the President of the Society,

JOSIAH G. BECKWITH, M.D., OF LITCHFIELD.

GENTLEMEN:

In accordance with the By-Laws of this Society, it becomes my duty to address you on this occasion.

Another year has completed its course and has gone to mingle with the mighty past, bearing upon its bosom an ocean of sorrow and of gladness; how rapidly has it passed away! No mighty voice nor startling sound have been heard to mark the flight of days and months, yet quickly and quietly have they glided through the various abodes of men.

It has been a year of momentous events in our national history. Our Southern horizon is still darkened with the cloud of battle, and its soil reddened with the best blood of the Republic. Our profession has fully answered the call made upon it for army surgeons to mitigate the horrors of the deadly conflict; some of them have fallen martyrs to exposure on the field of battle, but more, to diseases incident to the camp and to the climate.

But death has not confined its ravages to these alone. He has suddenly arrested in the midst of life, amid herculean labors, the distinguished Professor of Anatomy in the Medical Department of Yale College, the indefatigable Hooker. In the preceding year, when the ex-professor of Materia Medica, (Eli Ives, M.D.,) who had filled that chair with great ability, and had retired from active

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† Abridged and corrected by the Author.

life in the evening of his days to await his departure, when he received his summons to cast off this "mortal coil," the public had anticipated the event, and they were not surprised, for he fell like the ripe fruit of autumn and was gathered to his fathers. But when the electric fluid conveyed through the length and breadth of the land the sad intelligence of Hooker's death, all were startled by the news; the periodical press gave utterance to the public voice in exclamations of sorrow and regret that one who filled so wide a field of usefulness, before his eye was dimmed or his step faltered from age, should have left the world forever. All will bear witness to the zeal and ability with which he discharged the arduous duties which devolved upon him up almost to the last hour of life, and will embalm his memory with those who have preceded him, in their affections.

At the last annual Convention I had the honor of addressing you on the progress of medicine during the last fifty years. I exhibited the claims of humanity in behalf of the profession; for the innumerable blessings which have been dispensed through its hospitals, dispensaries, asylums and other institutions of public charity; for the assistance of forensic medicine in the detection of crime, thus throwing around human life the panoply of its protection. For all its agencies, not only in rendering life endurable, but comfortable, and greatly extending its duration, and everywhere, on every side, carrying light and comfort into dungeons and prisons—and dispensing to every form of suffering humanity all its benefits and charities with a God-like hand. I now propose to devote the brief hour which is allowed me, to considering *the moral dignity and grandeur of the medical profession*—showing its connection with civilization, political economy and with all the enduring and substantial interests of national welfare and greatness; and we shall glance at the intellectual and moral endowments, and the education necessary to qualify the physician to discharge the duties of his profession in the age and times in which we live.

This moral dignity and grandeur of the profession is evident from the history of the science itself.

The word medicine, in its most restricted sense, signifies whatever may be administered with a view of relieving or curing the patient;

in an extended and philosophical sense it implies all the knowledge necessary to practice the art. The science of medicine therefore includes every branch of medical science, and all the divisions and subdivisions of the art of healing. Practical medicine therefore includes surgery, pharmacy, midwifery, medical chemistry, botany and zoology; in this broad and comprehensive sense it is synonymous with the "theory and practice of physic."

The knowledge necessary to practice medicine requires a full and intimate knowledge of the nature of man and his relations to all nature which is around him. Hence physics, the old term for the science of nature, is synonymous with medical science, and as a sequence, *physician* is but another name for medical practitioner.

This grand old name for the students of the science of human nature, is so comprehensive, and so clearly indicates the duties and privileges of him who has to apply that science to the welfare of man, that it is to be hoped, that it will not pass out of use, but on the contrary the physician henceforth shall be as his name imports, able and fit for the practice of medicine in all her parts.

The above remarks are so pertinent to the subject, that we could not consistently withhold them from your notice. They are from a standard work of great celebrity, to which we shall have occasion often to refer in glancing at the origin and early history of our art. They show, what has been regarded from the earliest eras of light and knowledge, as the legitimate inheritance of the profession. They yield to it, for its use every agency necessary "for the preservation of the vital machinery in health, the restoration of it to health when disordered, and the development of it to greater perfection," which implies the prevention and cure of disease and the "improved condition of man."

Our limits will not permit us to enter into an extended consideration of our early medical history, to its origin in instinctive medicine, readily passing into the patriarchal, in which the head of the tribe, being the repository of all power, was the medical head also in the further development of society; the priesthood united to their functions the powers of healing; after which it became an organized profession, and society advanced to a state of high civilization, but falling under the power of the military hierarchy, religion, civilization, science and medicine all fall together under the same reign

of despotic power, and rise together under the benign auspices of civilized society.

The medicine man of the North American Indians is regarded as the germ of the sacerdotal caste, which held power so long among the great nations of the East. We are told "that politics and law, religion and science," and with these medicine both as a science and an art, were exercised by the priesthood exclusively. The Mosaic writings show a remarkable remnant of our science, manifesting a system of public and domestic hygiene established among the Hebrews, by Moses, who was educated in Egypt, and reflected their doctrines and domestic polity.

The Levites were the physicians of the Jews for a long series of years. It is supposed by some that the priestly office was divided and that from this division arose the profession. The "Ayur Veda" appears to be the ancient Hindu book on medicine, 1400 years B. C., and 900 years before Hippocrates. This great work was a compendium or abridgment of the doctrines and practice still more ancient, which had been collected with great labor by the priests. This great work contained eight divisions, two on surgery and obstetric surgery, one on general pathology and the practice of physic, the fourth, psychological medicine, fifth, the cure of infantile diseases, the sixth, toxicology, the seventh, to general hygienic and metallurgical chemistry, the eighth, to the diseases of the generative functions.

European medicine dates its literature from the time of Hippocrates, B.C. 500 years. His writings give a complete summary of the doctrines and practice in Greece. Fifty years after the Trojan war, and in the 12th century, B. C., a temple was erected to Esculapius: this was the sacerdotal period of Greek medicine, when the sacerdotal medical caste caused temples to be erected throughout the civilized world. In these temples the practice was carried on with all the modern elements of empirical medicine—we are told that they had hydropathic establishments situated at or near thermal springs or fountains of living water or upon the sea coast or amidst beautiful mountain scenery. Diversion of the mind, exercise of the body, regulated diet and regimen, friction and inunction of the skin, sea-bathing, mineral baths and waters, these and similar agencies constituted their treatment. These temples of medicine being hospi-

tals, were the medical schools of those times. History has preserved the names of the most celebrated temples of Esculapius. That of Rhodes, the most ancient, was not extinct at the time of Hippocrates. That of Cos gave birth to Hippocrates. It was the time of Pericles, when Greece attained that proud eminence in war, religion and philosophy. The age of Socrates, when he brought moral philosophy to simulate christian morality, and when natural philosophy, logic and metaphysics were cultivated.

Pythagoras, who studied philosophy and medicine in the medical schools of Egypt, Chaldea and India, and who obtained an ample knowledge of science and philosophy in these schools, gave an impetus to Greek philosophy and science on his return. He is thought to have been cotemporary with Confucius, the great reformer of religion and morals among the Chinese.

But the wars of Alexander the Great interrupted the progress of Greek philosophy and freedom. National culture and science and medicine were trampled under the feet of military superstition.

But the medical profession and its literature in Rome did not arise from the sarcedotal profession. The first purely professional man was Archagathus, a Greek, on whom, according to Pliny, the freedom of the city was conferred, and they purchased for him a shop for surgery on the Acilian causeway. The imperial city extended her power and influence over the cities of Sicily, Greece, Asia Minor and even Egypt, and attracted among the men of great intellectual ambition and energy, Asclepiades, who had studied in Alexandria and Athens, and established himself as Professor of rhetoric in Rome, B. C. 90. The Greek language and its literature was studied by the sons of the nobility of Rome in the great seats of science in Greece. Asclepiades having the intimacy of the illustrious men of his day, and Cicero among the number, opposed the doctrines of the schools, and promulgated his own philosophy, which was speculative. He termed the Hippocratic method of observation as a "meditation on death." He had a sort of homœopathic maxim that one fever would cure another. He was also hydropathic, and the inventor of the shower bath.

Themison, his successor, came from the Laodicean school, which sprung from the Alexandrian school. He favored the sect of the Methodists, a term which gave name to the religious sect which

originated in 1789 with John Wesley, a great ecclesiastical reformer and Fellow of Oxford University. They allotted to each day its diet and regimen in detail, occupying a period of three days or ternary.

Thesalius succeeded Themison, and was a fit physician during the reign of Nero. He gave his pupils authority to practice after six months study, and professed to make them perfect in the art in that brief period.

Soranus, who settled in Rome, was a man of science, studied anatomy, wrote the life of Hippocrates and systematized the practice of medicine.

Cælius Aurelianus, his cotemporary, published one of the best works of the day on the practice of medicine. He was a methodist, but with a return to scientific culture this sect disappeared.

Cornelius Aurelius Celsus was the cotemporary of Asclepiades and Themison. He wrote on military affairs, agriculture, rhetoric and medicine. He was probably a practicing physician at Rome. He was a learned and scientific Roman. His writings are in our libraries; they take equal rank with Hippocratic writings as classical works. Celsus recommends in the treatment of hydrophobia that the patient be plunged over head into water, raised again for a brief period, and so alternately submerged and withdrawn, a practice still pursued in some countries, evidently derived from him.

Galen, a representative man in Rome, went thither A. D. 165, a native of Pergamus. He finished his education at the great Alexandrian school. His time was devoted to the compilation of the knowledge of his times. His works are a perfect encyclopædia of medical science in his day. His writings took rank with Hippocrates, and were regarded as equally with the latter, a text book of medical literature until its revival in the 15th century.

This era was the culminating point of Roman science and literature. Marcus Aurelius the patron of Galen knew how to value science. He traced his pedigree back to Numa, the scientific king, and through an extended line of noble Roman ancestors. Although the prospect seemed fair for science and medicine during the period of Galen, yet his was the last work on medicine. Barbarian foes on every side, like vultures, brought down the Roman eagle from her towering height, and spoiled the empire; civilization and medicine

fell under the eclipse which continued through the dark ages. Despotism reigned supreme. Military power detested science; hardly had Galen died when Caracalla, the parricide and fratricide, visited that great seat of science, Alexandria, under false pretenses, gave up the city to slaughter, forbade the teachings of Aristotle, whom he hated, persecuted the professors and their disciples to death. Caracalla was a representative man, a type of the age. Religion, literature, and medicine all declined rapidly, and were equally debased in Western Europe. Boethius, born A. D. 470, was the last of note in the Roman era of science. Sacerdotal power was alone able to overcome brute force and maintain some degree of social order, and gathered under its protection the shadow that remained of philosophy and medicine. The era of Gregory the Great witnessed their revival.

Medicine, which had nearly expired at the West, longer withstood the elements of social decay in the East, and revived in the new metropolis of the empire, founded by Constantine the Great, A. D. 328. Cosmopolitan grandeur had only eclipsed it here. Greece with her colonies, cultivated the arts and sciences during the Roman dominion. Social relations being changed, and pagan mythology becoming extinct, it came under a religion which was about to be supreme over the civilized world. The change which had been so disastrous to social order in the West was less so in the East.

But the Grecian schools did little to advance medical science. The christians opposed more strongly than the Romans the dissection of human bodies. Tertullian, partly a cotemporary of Galen, villified the memory of Herophilus 500 years after his death, designating him as "that physician, or rather butcher, who dissected 600 men in order to find out nature," untruly stating that "his victims did not die a natural death, but expired amidst all the agonies to which the cruelty of the anatomist was pleased to subject them." Hence anatomical research was less than ever possible.

Oribasius, attached to the Court of Julian the Apostate, flourished in the 4th century. He wrote seventy-two books copied from Galen and Hippocrates and other authors.

Aetius wrote A.D. 525, summarizing like Oribasius, and like him quoted authors not mentioned by previous writers, and introduced, in consequence of his Eastern birth, knowledge obtained from Egypt

and Persia, also the doctrine and use of rites, spells and incantations, which had begun to disfigure christianity.

Procropius, the historian, appears to have been learned in medicine. He mentions several medical cotemporaries, and speaks of the plague of 543, which spread through the known world, and in Constantinople carried off 10,000 persons daily when at its height.

Paul, of Egina, the last of the medical writers in the palmy days of the Eastern or Byzantine Empire, flourished in the 7th century. He was a representative man, a learned and practical physician and skillful surgeon. A voluminous commentator and compiler, quoting largely from works not mentioned by his predecessors, he brought up the science to its latest development in the East, as Galen had done in the West; but while he was writing, the tempest which was to fall with destructive force was gathering. Heraclius had to defend his empire on all sides, and in the same year Mohammed openly assumed the character of legislator and prophet; in 640 the Arabs captured Alexandria. The schools of science and philosophy were broken up, the professors were driven away, and the great library it is said by some was burnt by order of Omar 2d. While the followers of Mohammed were wresting from the christians the fairest portions of their eastern provinces, the emperor Heraclius was disputing theology with Pope John IV.

The Greek Empire became mutilated and degenerated, and medicine languished, with the emperors associated with political and religious decadence. Only one Greek name stands prominently in the history of medicine, from the fall of Alexandria to the date of the capture of Constantinople. John, the son of Zacharia, lived in the 13th or 14th century, and was surnamed "Actuarius," an honorary title of chief physician to the court. Religious bigotry and superstition exiled the best minds of the nation, and drove them to the colleges and universities of the politic Caliphs, and at a later period drove them from the Moslem and Greek universities, when in 1453, the Turks having captured and pillaged Constantinople, a number of learned Greeks taking all the literary treasures they could carry off, fled into Italy. That event closed the era of Greek civilization and science, and then, after a long period of gestation was the birth of true or European civilization. The flight from Alexandria carried the light of medical science back to Greece and Southern Italy, and

medicine was again developed in Italy which became the source of light to Europe. But the great seat of medical science was now transferred to Asia. The conquering Caliphs patronized literature and science with the zeal of the Ptolemies: from the Indies to the Ganges, science was cultivated, and flourishing schools of medicine existed in India and Tartary. The Arabs had not only at this time a strong taste for medical studies, but there is reason to think that the prophet himself was a student of medicine and a medical author. The schools of Alexandria were re-established, and at the commencement of the 9th century the Patriarch of Alexandria was so celebrated for his skill, that the Caliph Haroun-al-Raschid sent for him to visit one of his sick wives. European science was acquired by the Arabians from the Syriac translations of Greek medical science called *Pandects;* they were translated into Arabic in 687. In 767, Bagdad was founded by Caliph Almanzor, the Victorious, a great patron of science. He paid a fee of 10,000 gold pieces to an Indian physician, a graduate of Nisabur, by the name of Bactishua. He translated numerous medical works into Arabic, but the great translator was Honain, a Christian well acquainted with Greek, Syriac and Arabic. He possessed a great library of scientific works. It is said the Caliph Almamon paid him in gold a sum equal in weight to each work of Aristotle he translated. The fifth Caliph of the House of Abbas Haroun-al-Raschid, adorned Bagdad with colleges and hospitals and made his court the seat of science, which were added to, under Almamon until it rivalled Alexandria and Athens as a seat of scientific culture. He first set the example of attaching to every mosque a college and an hospital; an example strictly followed by the Moors of Spain. Almamon the Second ascended the throne of his father, the great Caliph, in 840, and followed his example in the enthusiastic pursuit of science. He erected Observatories and furnished them with suitable instruments for making astronomical observations.

Rhazes, born in 852, was a voluminous writer and compiler. He wrote on measles and small-pox. The highest development of Arab culture was initiated in the 11th century.

Arab medicine declined in 1242. The distant regions of the Empire and the various provinces became kingdoms under military commanders; it was the period of religious and political decay.

The Turks finally conquered Bagdad and left no traces of science behind.

In the year A.D. 748 medicine in common with Arabian science found the same support that it had received in the East among the Mohammedans of the West. In 711 the Arabs penetrated into Spain from Africa and laid the foundation of the Moslem Empire in Western Europe. A descendant of the Ommiades dynasty, Abd El Rahman, escaped from Bagdad, took refuge in Spain, established himself in the government and made Cordova his capital. His successor, the third of his name, who reigned in the 10th century, was the greatest Emperor the Moors ever had. He fostered every kind of science and art, founding colleges, schools, libraries, and constructing roads, canals and acqueducts, following in all respects the illustrious examples of Almanzor and Almamon. His son and successor, Al Hakem 2d, had an unbounded love for science and literature. He attached the learned men of every country to his court, founded the library of Merwan of 250,000 volumes.

Within 500 years of the conquest of Spain by the Arabs, science had so developed itself, that it could boast of 70 public libraries, three academies at Seville, Toledo and Marcia, besides the world-renowned University of Cordova, and hundreds of authors and teachers.

But Arab medicine in the West reached its culmination and began to decline in 1150. Avenzoar was the Galen and Avicenna of Spain, his father, grandfather and himself, were men of high reputation in medicine. He was a Jew by religion and race—rich and of noble birth, a learned commentator, and his works were esteemed in the scientific world like those of Ebn Sina.

Averrhoes was his pupil, educated in the University of Morocco, where he studied law, which he gave up for medicine, mathematics and philosophy. His father was High Priest and Chief Judge of Cordova, and he was his successor to these offices at his death, and was removed for scepticism. He wrote a system of medicine intended to be a compilation. Medicine here declined, and the bloody civil wars rent the Empire, and struck at the heart of Moorish power. A priestly blight of science fell upon Spain at the time when the rest of Europe was beginning to cultivate every branch of human learning, and is still felt in that unhappy country to the present time. So ended Saracenic medicine.

We now come to the consideration of European medicine. Rome's imperial dominion ended with the capture of the city in 472, and the abdication of Augustulus in 476. This finished the succession of phases of ancient European society. Amidst the troubles and distress of the dying Empire, the Municipalities had held to laws and government, and the people found in the superior wisdom and power of the clergy, the best safeguard for peace and social order. In 466, when the Bishop of Rome was elected to fill the Episcopal chair by both clergy and people, is dated the commencement of the sacerdotal period of modern civilization. The military power was gradually but certainly to yield to the priestly power by the reconstruction of society in its very elements; not by a conquering prophet, but slowly and gradually, the civilization was effected by the spread of the Christian religion among the barbarians of both West and East, and light burst forth at last in the 8th and 9th centuries, from Ireland to Bokara and Hindostan. It was the deliverance of the race from the degradation of paganism to the grand march onward to civilization and freedom.

Charlemagne the Great in the 8th century, in his encouragement of the arts and sciences, followed the examples of the Caliphs of Bagdad. During his reign the Cathedrals and Monasteries of Christendom had libraries, colleges and schools, in which medicine was taught under the name of Physics or philosophy of nature. Priests, Abbots and Bishops studied medicine and were physicians to kings. The Arabs were encouraging science and arts in Asia, Africa and Spain. Alfred the Great was rivalling their example in England. Science and civilization revived from the overwhelming surges of barbarism. But again the grand movement was checked by the continued renewals of the pagan barbarians of the north, and the Moslem of the South. The former were successful: the fairest portions of Northern Europe came into their possession and with them ignorance and a demoralized social condition of the country. In Italy, and the north of France and Spain science still advanced until the 13th century. Salerno in Southern Italy maintained an eminent position from the 10th to the 13th centuries. Constantine of Carthage, a professor, travelled, like Pythagoras of former times, through Egypt, Ethiopia, Arabia, Persia and India, then under the Caliphs, where the arts and sciences were at their zenith. On the

shores of the Mediterranean the same changes occurred which we have so often witnessed. Commerce introduced wealth, this introduced the arts and sciences, then freedom of opinion was demanded, and the power of the priesthood questioned. They in return called for the military power: then contentions arose between the dogmas of the priesthood and new opinions: the society became demoralized and with it the loss of political and religious freedom. The 12th, 13th and 14th centuries were remarkable for great commercial, religious and intellectual activity, and an attempt at reformation in religion. The Inquisition was then established and the wars with the Albigenses. The sacerdotal power became absolute and it was then declared that the practice of medicine was incompatible with the priestly office. Science and philosophy were thus secularized, and the study of medicine became where it now stands. Then the change by the popes followed that of elevating the Cathedral schools into universities, in the 12th, 13th and 14th centuries; they patronized science and literature; the schools of the Moslem and the Greek were visited, and enthusiasm was everywhere kindled in the pursuit of knowledge. Albertus Magnus and Roger Bacon were two of the most distinguished of the mixed scientific and medical authors of the day, the first a prelate high in papal power, and the second a Franciscan priest—both took grand and comprehensive views of the natural sciences, including medicine in all its practical relations and accessory departments.

Practical anatomy was restored by Mondini, Professor of Medicine at Bologne. He made two dissections, and published an anatomical work with plates. Surgery and medicine were advanced by Arnold de Villeneuve and Guy de Chauliac. Alcohol was discovered by the former. Guy de Chauliac was a representative man—he flourished in 1350, he was a learned surgeon, he had mastered Arabic and Greek literature and his writings constitute a summary of the knowledge of his time. He ranked with the established authorities of science and arts, and the learned of all nations translated and commented upon his works and they were adopted as text books.

The sacerdotal power was irresistible. An attempt was made to assert and maintain religious liberty in the 13th century in Southern France and in Italy; it was extinguished in blood. Then came the fires of the Inquisition. Medicine and science did not escape those

fires. Roger Bacon suffered the same fate as Galileo two centuries later, and the Inquisition tried Peter de Apono, a physician, for hersey after death, and ordered his body to be exhumed and burned. Then arose the struggle between religious truth and corrupt traditions, between natural and experimental science and the dogmatic theology based on the philosophic speculations of Aristotle; the latter was victorious, science and medicine declined for a century. At the commencement of the fifteenth century commerce revived in Italy and on the shores of the Mediterranean, and with it the arts and sciences. Before the close of this century the Latin and Greek classics were printed, Andreas Verrochio impressed upon artists the necessity to art of anatomical knowledge, de Vinci made dissections of the human body at Vaverola. He was an observant physiologist, a profound mathematician, a skillful architect, a printer and sculptor.

It was an age of immense progress. Commerce extended, society was consolidated, political power began to be developed—an age of large cities—science, art and literature were publicly patronized by rulers and governments. The history of the Medici family of Florence in its relation to literature, science, and the arts, from Cosmo, the Pater Patriae, born in 1389, to Leo X, who died in 1521, is the history of what this class did for science in all Italy. Giovanni De Medici left two sons, who with their descendants were distinguished for commercial enterprises, and Cosmo, the elder, surpassed the princes in his munificent support of literature and science. His grandson, Lorenzo De Medici, carried on the scientific enterprises which Cosmo had begun, and when Constantinople was captured by the Turks he welcomed and employed the learned Greek refugees as teachers of the Greek language, literature and the arts. Leo X, a great sacerdotal ruler—the Haroun-al-Raschid of his era—was the son of Lorenzo the Magnificent, and trod in the footsteps of his ancestors in their patronage of literature. He founded a Greek college at Rome, established a Greek printing press under the care of John Lascaris, who had brought 200 manuscripts for his father from the East, restored the University of Rome in all its departments, and collected all the available talent about him to add to the literature of the times. *This was the age of Leo X.* Here culminated mediæval civilization. Its great characteristics are two,—the restoration of

Greek philosophy and literature to Europe and the discovery of the art of printing. Henceforth science was to walk forth independently of kings and priests: with the printing press, it passed into the hands of the people and had now a dominion of its own. On the capture of Constantinople, students flocked from all parts to attend the lectures of the Greek refugees, and thus gave a new impulse to Greek medical science. Thomas Linacre in 1484, the founder of the College of the Physicians at London, left Oxford for Florence that he might attend the lectures of Demetrius Chalcondylas, and became an inmate of the palace of Lorenzo De Medici. From Italy the taste for literature, sound learning and books, came into Europe; Arabian and Greek medical literature became irrevocably European, Anuce Foes had completed the great work of translating the Hippocratic writings; and great numbers of authors arose at this period. It may facilitate the comprehension of the character of existing modern medicine to look back upon the devious course we have travelled over, extending over 3000 years. Our first glimpses of medicine show a sacerdotal predominance in Egypt, India, Judea, Phenicia, Greece, as far as we can see back in history. Fifteen centuries of the Christian era have elapsed, and we find it in the same control still, in the hands of Pontifex Maximus, who is like his Roman prototype, who has held the power for over 1000 years. That power must now yield. Religion is no longer the binding tie of society. The former reformation quenched in blood, has now commenced in Germany on a larger scale. The decline of sacerdotal power commenced in Europe when Luther affixed his ninety-five propositions to the gate of the Castle Church in Wittemburg in 1517.

Let us now in conclusion glance at the history of our profession from 1518, the period of the reformation, to the 19th century. Linacre, whom we have mentioned, proceeded from Florence to Rome to study medicine and natural philosophy, more particularly the works of Aristotle and Galen. He graduated at Padua. Henry VII, and his son, Henry VIII, and Cardinal Wolsey, patronized him. The Bishops then had the power of granting licenses to practice medicine. As this power was abused by licensing ignorant monks and empirics, Linacre, through Cardinal Wolsey's influence, procured letters patent, founding the College of Physicians in Lon-

don, A.D. 1518. He was first president of the college. John Kay succeeded him and founded the Medical College at Cambridge, Eng. Harvey, like Linacre, graduated at Padua, where he studied anatomy, and returning to England discovered the circulation of the blood. This added much to the scientific treatment of disease. Sydenham was another of the great lights in medicine. He graduated at Montpelier after graduating at Oxford. He was forty-six years younger than Harvey, being born in 1624. Several distinguished men arose on the continent almost at the same time. John Riolau of Paris, was the opponent of Harvey, and being the most distinguished anatomist of his time, his influence delayed the acknowledgment of Harvey's discovery. When the medical world accepted that truth, changes were rapid; Malpighi demonstrated the motion of the blood corpuscles in the capillaries. Pecquet discovered the anatomy of the lacteals in 1647. He was a student of Montpelier. All the departments of medical science made great progress. Hence also arose new theories of respiration and nutrition. The philosophers went back to the Arab and Moorish literature and laid the foundation of modern chemistry. The principles of this science were very soon applied to anatomy, physiology and pathology. Paracelsus was at Basle in 1529 teaching a mixture of medicine and astrology. He introduced new remedies into practical medicine, especially mercury and antimony. Van Helmont a century later established a chemical school. In 1659 Willis was eminent in England. He was appointed Sedleian Professor at Oxford. He made researches into the anatomy and physiology of the brain, distinctly advancing the modern doctrine that the brain is a congeries of organs, and especially assigned the cerebellum to the involuntary motions. He held discussions with Descartes, Newton, Leibnitz, Locke, Sydenham and others, and later in the century Hoffman and Stahl. Willis gave all his Sunday fees to religious purposes.

Midwifery originated in 1668 in a treatise by Mauriceau, chief accoucher to Hôtel Dieu in Paris. Surgery was behind the other departments at this time. Richard Wiseman, surgeon to Charles I, was most distinguished.

Conrad Gesner of Basle, laid the foundation of modern Botany in the 16th century. In England, Grew advanced vegetable botany and physiology beyond his cotemporaries. John Ray laid the found-

ation of Zoology. A very general survey of the state of medicine in the 17th century shows that it advanced more than in any preceding century. It was an age of great progress throughout, but the great event in the medical history was the foundation of the Royal Society in 1645.

Theologians were still predominant in the Universities, and fettered inquiry. Medicine demanded freedom. Politics were discussed with the sword. Medicine sought after truth in peace. Hence it happened during the hottest part of the civil war that the most distinguished members of the profession banded themselves together and organized that most distinguished home of science which has existed for more than 200 years.

Clinical medicine was established in the commencement of the 18th century; the first systematic attempt was made about the beginning of the 17th century by Otto De Heurn, at Leyden University. The fame of Leyden as a medical school was now great. In 1701 Boerhaave was elected to the chair of the Institutes or medicine or physiology. He was a representative man. At the age of eleven he read Latin and Greek with tolerable accuracy. He added the study of Hebrew and Chaldee with modern ecclesiastical history and mathematics. He took his degree of Doctor of Philosophy at twenty-one, Medicine at twenty-five; eight years afterwards he was appointed Professor at Leyden; and in 1795 Physician to St. Augustine Hospital, and gave clinical lectures twice a week. He held also the chair of Botany and Chemistry with Theory and Practice. He reduced to order and systematized the accumulation of the preceding century. He was called the Galen, the Ebn Sina, the Fernel of the age.

Cotemporary with Boerhaave, and like him, the son of a protestant clergyman, we find Mead, educated at Utrecht. He studied medicine at Leyden and graduated at Padua, became Physician to St. Thomas Hospital and physician to George II. He wrote elegant Latin and read Greek and Arabic. He wrote "Medicina Sacra." British medicine is closely allied to the University of Edinburgh from the close of the first half of this century. They followed Boerhaave and established a chair of clinical medicine with Rutherfurd and Monro, the first clinical professors and lecturers on surgery and medicine. Whytt, the Monros and Gregory, were eminent teachers and writers. But the great man of the Edinburgh school was Cullen.

He was the great connecting link between the doctrines of Boerhaave and those which arose during the great revolutionary wars. The intimate friend of Sir William Hunter in early life, he commenced lectures at Glasgow on chemistry, from thence he went to the University of Edinburgh in the same chair, in 1763 he succeeded to Materia Medica, in 1766 resigned chemistry to Black, and was associated with Gregory in the chair of Practical Medicine. Cullen, like Boerhaave, systematized medicine. Cullen commenced a compilation of Boerhaave and ended with a great work of his own, now found in the library of almost every physician. Van Smieten in Germany was his great rival. Albert von Haller was writing a great original work on physiology. He used Boerhaave's institutes on this branch, but that year published a work with which we are now familiar; and till the end of this century he was one of the great lights of medicine. When medicine started from a new stand point, literature and science also were developed in grand and similar proportions. Our limited space does not allow us to dwell on the great advances made at this time in all these kindred departments of medicine. Black led the way for the discovery of carbonic acid gas and the laws of heat. Cavendish discovered hydrogen gas, Priestly, oxygen and other gases; on the continent, Bergmann and Scheele were moving in the same onward direction with Guyton, deMorveau, Lavoisier, Berthollet, Fourcroy and others. A new nomenclature was given to the science and it was re-cast from the foundation.

We find therefore that we commence the present century under the most favorable auspices. Chemistry springs from its legitimate source, medicine itself; and modern civilization is almost established anew on enduring principles, and what was before a matter of conjecture becomes intelligible. The means of controlling nature and investigating her secrets were placed in the hands of scientific men. The laws of heat as developed in steam, in manufactures and metallurgy, of electricity and galvanism, and of chemical affinity, have been applied to practical uses in society; and we are furnished with improved apparatus for the development of physical science. Astronomy and meteorology have their appropriate instruments, and great discoveries have resulted from these new investigations and researches.

We are now brought to the period which was briefly considered in the address which I had the pleasure to read before you at the last Convention. It is not my intention to recur to the great improvements which have been made in the science during the present century, nor to dwell upon the great merits and distinguished services of the illustrious men, many of whom still survive, whose names are as resplendent in our medical history as if they sparkled in the constellations of the heavens.

I have given you a brief and imperfect compilation of the history of medicine from its origin in man's

> "First disobedience and the fruit of that forbidden tree
> Whose mortal taste brought death into the world, and all our wo,"

until the present century. The most authentic sources have been consulted, and the great lessons and important facts which are given either in my own or another's language are worthy of being treasured up by the profession. We observe that the *progress* of medical science, from the earliest eras of knowledge, has been the march of civilization—of true philosophy and religion—moving forward harmoniously in the sunshine of prosperity, with the patronage of courts and in the palaces of kings, or when they have been driven by bigotry, ignorance and superstition into mountains and caves for safety, they have been exiles together, until light has dawned upon some other portion of the earth, when they have emerged from their retirement together, to unloose the fetters of human bondage and carry on the great work of man's redemption. The history of the world, as exhibited in the history which we have considered, is but a roll of defunct nations, alike in career and destiny. To the Jewish, the Chaldean, the Grecian and Roman, and all the nations of antiquity in which we have traced our medical history, after they had arrived to the highest point of civilization and dominion, and when the sciences and medicine had advanced to their zenith and were marching forward to their glorious destiny, then came upon them the dark night of decline and subjection.

We have seen, in our history, states and empires slowly emerging from infancy and weakness, and becoming again powerful, consolidating their governments, perfecting their civilization, and then wealth and luxury following in the train of commerce, have pro-

duced the same inevitable results. The fruits of all past labor, the accumulated wisdom of centuries, the vast labors of genius, philosophers, statesmen and physicians have been swept away, and then from the deep gulf of degradation begins the same laborious ascent to greatness, the same descent to deep degradation. The history of the world, we have seen, is a series of ever-recurring cycles of eras of refinement, civilization and power, lost again in the night of barbarism. Go with me to the immortal records of Greece and Rome, when in the days of their glory. That such an age at such a culminating point of greatness should have been attained, to sink into the grave of bygone nations, conveys to us lessons of instruction; but they have not lived in vain. The language in which they are written, like the terms in our art which we derive from the Greek fathers of medicine, are embalmed—on them death has set his seal. The grand and beautiful creations of the poet's fancy or the orator's harangue, their form and fashion cannot change. "These beautiful creations are like gems in the mine, or crystals in the rock." The materials of our own age and all modern ages are changeful and vascillating to suit the ever-varying taste of the generation on the stage of life.

The names of the philosophers, poets and medical worthies of the civilized eras of those bygone centuries will go down to the end of time, for letters are imperishable—monuments which the remorseless hand of time cannot efface nor destroy. So with the literature of the fathers of medicine. The Greek and Latin languages have enshrined and embalmed her literature, making them classical and enduring for all successive time; it is said the moderns write in sand, the ancients in adamant. What a broad and comprehensive literature has the profession as its inheritance, reaching back to the great Hebrew conqueror; receiving the accumulations of all the ages since that period. What vast learning and labor have been consecrated to its service; in truth it has been associated with all the learning of the successive eras of civilization: and when it required the protection of sacerdotal power, that aid was dedicated to its service, so that it was watched over and protected by God himself.

On a review of its history, says an eminent encyclopedist: "The career of great conquerors and the deeds of destroyers of mankind

wholesale are more exciting themes than the unobtrusive doings of those who have preserved more lives than even the most ruthless conquerors have destroyed. The time will come, if modern civilization endures, when the moral grandeur of the medical profession will be acknowledged; then its progress will be felt to be one of the most interesting chapters of the history of mankind." But the moral grandeur and dignity of the profession is not confined to its noble and time-honored history and its classical and comprehensive literature. It derives additional dignity and grandeur from the consideration of the important field of operations which the profession occupies.

Man, the great and noblest work of the Creator, constituted by him to be lord and sovereign of the universe—to hold dominion and power over all that he had created on the earth. Well might the immortal poet of nature exclaim, what a piece of work is man, how noble in reason; how infinite in faculties; in form and motion how express and admirable; in action how like an angel; in apprehension how like a god; the beauty of the world; the paragon of animals.

This mysterious and wonderful being becomes the subject of our study and the object of our investigation. The entire man, in all his relations, physical, moral and intellectual. The other learned professions regard him as the subject of obligations and as amenable to statutes, human and divine. Contemplating him as an accountable being, they act as tutors and governors in preparing him for usefulness, and in keeping him in the pathway of duty here, and preparing him for another state of existence hereafter, to which this life is merely probationary. In no other profession does the mind act so independently and with such an extended field of operation as in the medical profession. The lawyer has his statute laws as his guide, and is regulated by the decisions of courts of law and chancery. The clergyman has his high commission, and his supreme authority is "thus and thus saith the Lord." But the physician must be governed by general rules of practice and must exercise an independent judgment adapted to the exigencies of the case. The profession regards man in his physical structure, notices the beautiful symmetry and arrangement of the several parts, and the perfect adaptation of the whole system to the conveniences, wants, and the

pleasures of the individual. There was a period when it was thought impossible for man to exist beyond the limits of the temperate zones. The ancients supposed that man could not exist in the torrid zone; that every form of life would be annihilated by the sun's rays, and that the deadly cold of the polar regions was equally unapproachable by man. Geographical discoveries dispelled this error. Man has been found enduring extremes of heat and cold in which no other organized beings are found capable of sustaining themselves. Upon the banks of the Senegal he roams under the vertical sun whose heat causes some fluids to boil, while in Northeastern Asia he exists unhurt beneath a temperature which freezes mercury, and yet he possesses a more subtle and delicate organization than other animals; by the beneficent provisions of his Creator he accommodates and adapts himself to every climate by his physical adaptation to it or such clothing as his reason enables him to employ. The care which the Creator has taken of the human body marks his design as with a sunbeam.

This body is material, subject to disease, decay and death, but animated by a mysterious principle which we call life, a principle self-sustaining, self-acting, immaterial, undecaying, deathless; on the withdrawal of which this structure of beauty, design and strength crumbles into dust, returning to its original elements, it becomes the sport of the winds of heaven or enters into other creations in the economy of nature. The heavens proclaim the glory of God, and may in astronomy bear more *magnificent* testimony to his power—the wonderful operations of the Deity may be found in the footprints of rocks, but the body of man is a field of research, of investigation worthy of the highest intelligences who bow before the throne of the Eternal.

Man, the immortal moral agent, is placed in the midst of a material world, but he is not of it. In his intellectual character he is a reasonable and rational being, and brings the material world under his domain. He wields weapons of such tremendous power that he can produce a panic in the world. He marshals the hosts of men in battle array, and with engines of destruction which his genius has invented he batters down the munitions of rocks, destroys nations, and transmits his deeds of bravery and heroism to be read by after ages.

By his inventive genius he constructs aerial cars which ascend among the clouds of heaven, and the great ships which make the ocean the highway of nations, enriching commerce, or armed for destruction. He has made the electric fluid subservient to his will in bringing together the regions of perpetual snow and fervid heat, and by his mighty discoveries in chemical science he has revolutionized the civilization of our age. He has penetrated the depths of the earth and dragged forth its buried wealth, and from beneath the ocean, the hidden treasures of centuries. By the application of of steam to the mechanical arts, he beats the ocean into foam with steamships, and traverses the land with lightning speed; the steam press scatters his literature over the world; a single machine does the handwork of a thousand men, and like a blind Sampson, it grinds the corn of the people. By his discoveries and inventions in the arts and the sciences he has erected a magnificent monument to himself, which is as enduring as the history of our race. These are a few imperfect glimpses of human attainments, but enough to exhibit the moral dignity and grandeur of the profession to whose keeping is committed the preservation and healthy action of these wonderful intellectual powers.

With all these exhibitions of greatness and power, how helpless is man in the protection of his own existence; the slightest derangement may produce death, the smallest insect may destroy life: always the child of danger, Death hovers over his helpless hours of infancy, his manhood, and his declining age.

> "The boast of heraldry, the pomp of power,
> And all that beauty, all that wealth e'er gave,
> Await alike the inevitable hour:
> The path of glory leads but to the grave."

In our conclusion we propose to consider in the briefest manner, the moral, intellectual and educational endowments necessary to qualify the physician to discharge the high duties of his profession in the age and times in which we live. But what an age is this! It is an age unprecedented in the history of our race—of high civilization, of great discoveries and inventions, of unparalleled progress in our profession, of rapidity in the accumulation of wealth and in the diffusion of knowledge—the era of gigantic rebellions.

The popular watchword is onward, human life is disregarded, and the old landmarks of society are swept away by this headlong and irresistable human torrent, rushing forward to the accomplishment of its ends.

In contrast with this desperate progress of the age, our profession presents a noble contrast. Our progress has been steady and gradual; in the grand accumulation of its literature, in the higher standard of its attainments, it cautiously advances through long and intelligent processes of transition.

Human life, although protected by human and divine laws, can only be committed with safety into the hands of a profession composed of men of high intelligence, of extensive learning. We observe in the history we have given of ancient medicine that one important fact stands forth prominently—that all the great lights in the profession were men nurtured in the schools and educated in the colleges and universities of the day. Hence the researches and discoveries made by them, of which we receive the benefit. With learning, must be combined strong common sense, a retentive memory and sound discriminating judgment. He must be impressed that he has an important work to accomplish, requiring intense labor, study and observation to make it useful to the world. He must be a man of large brains and broad sympathies—broad enough to embrace the whole human family. The body must be educated as well as the mind; he should be strong for toil, and capable of enduring the inspiration of the mind. Such men are not usually fanatical, but useful and practical. They do not originate narrow systems and dreamy speculations, but substantial improvements and real reforms, based upon scientific research. The physician of this age must be eminently practical as well as liberal in his views. He must be a sort of balance-wheel to regulate the social system. He must be a patient man in the best sense of the word, a *gentleman*, kind, courteous, obliging, modest, generous and genial; conceding, forbearing, holding fast and loving all things good; not stubborn, but maintaining a manly independence. Such a man possesses the elements of moral greatness, and will exert a healthy influence over these stormy and perilous times. He will be useful to the profession and to the world, inspiring confidence and nurturing hope, evolving light out of darkness and dispelling the gloom which pervades the

chamber of death with the celestial rays which radiate from the great center of light and happiness. His faith will be strong from intelligent research in a system of medical practice which has a literature and history of which the world may be justly proud, being the observations of more than three thousand years, reviewed, corrected and tested by the experience of men of the greatest learning in the profession, men of profound research, and the discoveries in science and the arts during this whole period of time, of all the scientific men who belong to our brotherhood. And the march of improvement must still continue to be upward and onward. Constant contributions are being made to its literary wealth from the scientific researches of its hundred colleges and universities on both the continents, and by the observations of the thousands engaged in the practical duties of the profession. Higher standards of excellence and greater perfection in all the departments of medicine will yet be reached. These considerations will encourage every member of this venerable Society to do his whole duty in that noble cause to which he has dedicated himself during his brief day of labor; and in the consummation of this material world,

> "When the cloud-capped towers, the gorgeous palaces,
> Nay, the great globe itself shall be dissolved,
> And like the baseless fabric of a vision,
> Leave not a wreck behind."

We shall survive this wreck of matter and this crash of worlds. But the labors of our profession will have terminated with the annihilation of disease and death, and man's restoration to Paradise. The profession will then rest from their labors and enter upon the reward of enduring faithfulness to suffering humanity.

ARTICLE XIII.

LOGIC APPLIED TO MEDICAL SCIENCE,

Being the Annual Dissertation read before the Convention, May 28th, 1863.

BY JAMES C. JACKSON, M.D., OF HARTFORD.

Mr. President, and Fellows of the State Medical Society—

GENTLEMEN:

At the very threshold of all medical investigation, whether we consider it theoretically in the light of a science, or practically in the light of an art, stands the imperative necessity of some well considered plan of procedure in the solution of the intricate problem proposed to be solved. No leader of a military campaign can expect little but defeat and disgrace, who blindly enters the territory of an enemy without some idea of the obstacles he is likely to encounter, and without some thoroughly conceived plan of strategy by which he expects to vanquish his foes.

The most attentive observer of the planetary worlds above us must remain in profound ignorance of the wonders exhibited in the heavens, the changes that occur, the disappearance and return of stars, without the aid of a similar process. So in medical science it is equally necessary to a thorough comprehension of all its details, and to render it in the highest degree practical to the conservation of the public health and the cure of disease, that we should go beyond mere observation and empirical laws to a higher and more thorough conception of medicine as a science. Medical men seem, in most instances, to have been *unaware* of the steps they have themselves adopted in their investigations, and failed to *comprehend* the conclusions at which they have arrived in their inquiries, because they possessed no rules by which to be guided. Nevertheless, it is evident some logical mode of proceeding must

have been taken to have arrived at any rational plan of procedure in the treatment of disease. The thought has, doubtless, often occurred to us all, whether the conclusions we have made in our medical problems may not have been erroneous and our deductions fallacious, in consequence of some element which may have entirely escaped our observation, and thus rendered our whole theory false and our practical deductions incorrect.

It must be apparent to us all, how difficult would be the task to erect anything like an exact science from the materials we possess, or to reduce them to strict logical rules—still, if any mode of investigation can be made subservient to a more correct observation of facts, and a higher comprehension of the problems of medicine, a higher conception will have been attained, which may be turned to some practical account.

The mode of obtaining the results we thus have in view must be acquired by the "application of certain rules and principles of logic, to the study of medicine."

"Our aim," says Oesterlin, whose general plan I have adopted, "is a practical one—to show clearly and impressively the mode in which we must proceed in our observations, investigations and conclusions, in order that our Theorems and Problems may become more clearly intelligible, and that we may arrive at experimental truths and definite laws in our department of science, as well as at scientific principles of practice."

The practical physician, evidently, can have no intuitive knowledge of the nature of the occurrences that fall under his observation beyond what is common to all phenomena in every science throughout the whole domain of nature. His first unaided steps must consist in observation of facts as they are presented in these occurrences, and the effort to reproduce certain phenomena or attain certain results artificially, or, in other words, by experiment. In the beginning, his knowledge must necessarily be very imperfect, his experiments unsatisfactory, and his inferences quite uncertain. He has to deal with results, the primary causes of which are as incomprehensible to him as the changes of the seasons, or the successive variations of temperature from the cold of winter to the heat of a summer's day, to a child. He observes, for instance, a disease, but knows nothing of the condition of the human organ-

ism, how or through what peculiar changes it passes from a condition of health to that of disease, or through what process it again returns. The fact falls under his observation and must in some manner be connected with a cause, governing condition and laws; the process of which it is the prerogative of the theorist to develop and explain. So also of remedial agents; he knows nothing of their essential properties, or in what peculiar manner they operate upon the vital processes, or what combinations they effect with the elements of the system, to procure a state of health.

The early history of medicine, and indeed its later, to a very great extent, has scarcely made any greater pretensions to a science than a mere accumulation of facts and observations. The laws that govern the phenomena we observe, or the essential conditions of their existence, course and cessation, we know, as yet, comparatively nothing. Believing, however, as we do, that no occurrence or phenomenon in nature, whether recognizable by our senses or not, is devoid of an adequate cause, essential condition and laws of progress, we are led to infer that a science may be developed in medicine, and that our views and hypotheses may be reduced to firmly established laws, or, in other words, to a system.

What holds good of observation in medicine, holds good also in other sciences. Our ancestors, for instance, and the uncultivated inhabitants of all countries and ages, have been critical observers of the winds and weather, and have watched for ages the changes and course of the heavenly bodies without gaining any real insight into their connection with, and control over, the changes of the weather, or the laws of motion that govern them in their orbits, or indeed of their distances from us, their dimensions, their density, specific gravity, &c. So with observers in our own department of science, with all their observation of the phenomena in the human organism, its progressive changes from one condition or state to that of another, in all the past centuries, have they acquired any just and scientific knowledge of their real essence—a result never to be attained by observation, experience, or experiment, either in the way of auscultation or percussion, or by autopsy, or by the aid of the microscope or the crucible. These empirical facts, however, notwithstanding their inability to furnish us with

an edifice already finished and complete, are of incalculable value to us, as the first step, the raw material out of which we are to construct our future edifice. While standing in the midst of our materials, collected together in the greatest abundance, let us not commit the error of mistaking the beginning, for the conclusion of our task. "It is not the heaping together of individual facts and experiences, but the understanding of them, that constitutes knowledge," and it is because investigation has ceased at this point, that medicine has made no further progress, and is so far behind other departments of science.

We have only one mode of acquiring a sure understanding of any natural process, as a disease, or the *modus operandi* of a remedy; this is by bringing these phenomena and processes more thoroughly within our comprehension. We must strive to ascertain the condition of their origin and effects; learn their mode of progress, or in other words, to trace their causal connection and reduce them to a system of fixed laws. We must establish in our minds a theory, by the aid of which we can reason systematically and consistently concerning them, and be able to offer scientific demonstration of the correctness of our views. When such a step has been attained, and we are able to demonstrate agreeably to the conditions of our theory, the causal connection of any phenomenon whatever, we have established, in this particular instance, a science. Who of us, let me here ask, has not often felt his whole intellectual nature reaching out beyond the simple observation of facts, as they are ordinarily presented, to a more profound contemplation of their origin and laws. Not satisfied with the simple consciousness of their existence, we instinctively strive to master and comprehend the conditions of their connection and laws. The observer of any natural process, whether animate or inanimate, as a function or a disease, a rising tide, or the variations in the barometric tube, is urged by his very nature to an explanation of its cause. Thus the so-called practical man or empiric, whether he is conscious of the intellectual process or not, is compelled to form some idea of the phenomena he observes, and consequently theorizes concerning them, for to theorize is simply to reflect.

From what has already been shown, the fact necessarily forces

itself upon us, that no theory can be established in medical science without correct and comprehensive observation of facts and experience, for these are the material out of which our demonstration is to be elaborated; we may theorize over simple abstractions, and make no progress, because there is no foundation in fact or experience upon which we can ground the fundamental step of our investigation. Every theory must necessarily be firmly based upon experience if we expect any genuine progression, otherwise all our inferences and deductions are mere visionary speculations—"the baseless fabric of a dream."

Nor, again, on the other hand, can we institute any scientific plan for the treatment of disease, without first having established in our minds, some idea of its cause and the condition of its progress. Indeed it is impossible to take the first step in our art, without first forming for ourselves some notion of the causes of the vital phenomena and processes in any given case, or adopting those furnished us by others. Thus we must admit that all our artificial attempts and operations, or in other words, the practice of medicine, is the result of theories more or less detailed and comprehensive. "For our practice," says Oesterlin, "is after all but the more or less conscious application either of our general views or those furnished us by others, i. e., we take the principles and generalizations deduced from certain individual experiences and cases and apply them to any given case: So we estimate this individual case and treat it conformably to the views and theory specified, because without some such '*à priori*' groundwork for our operations, we could neither form a correct notion of it, nor treat it consistently."

Before entering upon any specific details of the steps to be adopted in our investigations, let us again repeat that it is not our object, because not yet in our power, to establish from the materials we have already collected, a system of laws sufficiently comprehensive and fixed to prove the problem under consideration. It must not be expected that I shall erect a system so perfect as to leave no labor for others to perform, or any system at all, but simply to indicate the manner our investigations must be conducted, in order that we may approach nearer the great first principle that lies at the foundation of our department of science.

In the first place, then, let us consider the problems of medicine in a logical point of view, with reference to the possibility of solving them. Also the topics and questions, both as a science and an art, with which logic has to deal.

To facilitate the fulfillment of the object we have in view, and gain an insight into the means by which we are to accomplish the task, we must first consider the phenomena and modes of occurrence, or in other words, the objects themselves, whose investigation and comprehension it is our aim to effect. Before, however, we can enter upon the processes through which the human mind must pass in its investigation into the phenomena and processes of our department of science, we must first ascertain and fully comprehend what it is we propose to observe, investigate and determine.

Again, we must ascertain what *are* the phenomena and processes to be determined, and learn their nature, condition and causal connection. If we proceed to the investigation of any problem in therapeutics, we must ascertain its nature, progress and influence, before any definite proposition can be offered; and besides, we must scrutinize carefully every modifying phenomenon which can in any manner influence the methods of our investigation.

Medicine may, agreeably to the views here entertained of it, be divided into scientific and practical. The precise object of the latter, is the prevention or the cure of disease, and the maintenance or restoration of health. The former, is the comprehension of all that relates to the invasion and progress of disease, also its period of convalescence and final cure. It demands a full comprehension of all the changes that occur from the commencement of disease till its full restoration, and its principal object is to demonstrate the causal connection of all its phenomena and processes from scientifically accurate observation and experience. "Medicine," says the writer we have before quoted, "can only be regarded as a science in so far as it demonstrates, or attempts to demonstrate, the natural and regular connection of the phenomena and processes that are presented to our notice, and then gives such explanations and advances such propositions in relation to them, as are founded on experience." As an art, it speaks in the imperative, demanding what we shall do and what shall be undone in order that we may

accomplish the end we have in view, which is the prevention or cure of disease. As a science, it speaks in the indicative, setting forth certain propositions and substantiating them by accurate demonstration of the causal connection of all the phenomena and processes presented to us for our investigation. Again, the prevention or cure of disease presupposes a scientifically accurate knowledge of remedial agents and their therapeutical application. As an art, it calls for the administration of all available means in our power which can aid the restoration of the living being to a state of health. As a science, it sets forth its propositions with reference to the nature and essential properties of remedies, and theorizes upon the changes effected and the manner by which they are effected. Again, in order to make a practical application of the conclusions reached, it becomes necessary to possess a knowledge of man and his wants—what agencies and influences, either of things external to the body or within the organism, coöperate to produce a state of disease, or, on the other hand, the restoration of health. But how is all this knowledge to be acquired? We must fall back to the fundamental source of all our information and learn, by observation and experience, their essential nature and mode of development, or in other words, their causal connection with the external world and with each other. "All this knowledge, necessary for practice, it is the province of medicine as a science to impart. In order to promote this object, all the principles or doctrines of scientific medicine must not only be correct in themselves, i. e., conformable to truth, but they must at the same time be such that practical medicine can with certainty deduce from them, its rules and precepts."

Medicine in its infancy was something very different from what we have been describing in the foregoing remarks. It had its origin in the necessities of mankind. Disease and consequent suffering demanding some immediate means of relief, resort must have been had to the simplest rules of empiricism; what had been observed to be followed by recovery in a single case, whether any connection in the whole process could be traced, sufficient to warrant the belief that they stood in relation to each other of cause and effect, might be employed in other cases of a similar character. Thus all medical knowledge necessarily consisted in a collec-

tion of a few practical rules and precepts for the prevention or cure of disease. This was all that the sick demanded of the physician; his wants extended no farther than relief from his sufferings and the return of health. It was the imperative, that his case required, and made an impression corresponding to the success of the precepts of the physician's art. His wants did not extend to the *rationale* of the process by which he had been restored. It was sufficient for him that the realization of his wishes had been attained. The practice of medicine was generally confined to the Priesthood, as comprehending the wisest men of the nation; they were employed simply to relieve and restore, not to understand, and demonstrate the process through which recovery had been effected.

The time, however, arrived, when the minds of men became dissatisfied with the results of mere empirical laws, and the desire was excited to gain some further insight into the ultimate causes of their observations and experiences. Instead of attributing every phenomenon in nature to the agency of the gods, they strove to advance from the point of observation and belief, or opinion, to a true perception, and through this perception, to a more perfect practice. So in all sciences, I think, we shall discover art to have preceded science, and observation and experience, true comprehension.

In order to determine what phenomena and processes must be regarded as the legitimate objects of our investigation, or the problems to be solved, we must confine our attention to the present state of medicine as a science.

I. A thorough knowledge of the living human body must constitute the fundamental object of our investigation—for in it, occur all those processes and changes which we call disease or pathological, equally with those that we denominate health, or physiological. Both processes occur in the same organs and in the same substances, and our inquiries concerning both, are essentially the same, for no demarkation can be indicated where the one ceased and the other commenced, because none in fact existed. In order, however, that we might comprehend the former, and consequently be able to learn and compare the laws that govern the processes in both, it became necessary that both should be investigated in connection.

To facilitate this end, it became necessary to study the organism in its material or anatomical form, and at the same time to learn its elementary or chemical constitution. This was the initiatory step to the perception of the functions, or the part played by them, in the vital processes, and was therefore an important advance towards a higher state of comprehension.

As all other natural sciences must be investigated and the laws that govern their phenomena and processes determined; in like manner must the laws that control the phenomena and processes in what we call disease, be investigated; and if, as we have before intimated, no line of demarkation can be drawn between the state we call pathological and that we call physiological, no change in the mode of investigation becomes necessary, beyond that required by the changed condition of each.

II. Having pointed out, to some extent, the substantive elements of the objects of our investigation, let us next consider the relation which the living organism bears to the external world. It cannot escape our attention that the organism must be sustained by influences external to it. The air we breathe and the food we eat, bear essential relations to the continuance of the phenomena of life, both in health and in disease. Here also we discover a similar law, to that which we have before referred, "that an exact boundary can no more be drawn between a healthy and a diseased state, than between the beneficial and fostering, or pernicious influence of external agents upon the living organism." The fact that the same external agent may at one time be beneficial, and at another prejudicial to life, produces no change in the agents themselves; they still follow fixed and definite laws in their manifestation and action.

III. The same plan of investigation must be adopted in our study, into the properties and modes of operation of all the medicinal agents we employ in the cure of disease. Before they can be applied to such purposes, we must learn their properties, mode of operation, and effects upon the living body.

Let us in the next place consider the methods and means by which the physician endeavors to acquire a perception of natural phenomena and processes from the study of their condition and laws.

From what has already been shown, the inference will readily be made, I think, that no special mode of investigation need be adopted in the mental process of our inquiries beyond what is employed in the investigation of any natural process whatever. If no line of demarkation can be fixed where the condition we call health ceases and that we call disease begins, any more than we can define the boundaries between the various meteorological phenomena which constitute good or bad weather, we shall be compelled to assume that the condition we denominate disease is a natural process, and must be submitted to the same mode of investigation as we do all other phenomena in the study of nature. Again, if we assume that no difference exists in the rules to be adopted in the study of physiological and pathological conditions any more than in any other natural process, that both are subject to the same conditions and laws, we shall be compelled to acknowledge that the same rules hold good in all the processes in the living body; and if those we call *vital*, manifest themselves conformably to definite and fixed laws, the same principle must apply to all those to which we give the name of disease. And again, if it is fully established that the agencies and influences of the external world act in the same uniform manner, whether resulting in the production of disease or in its cure, it follows as a matter of necessity that all the effects of these influences and agencies in the living body depend upon certain specific changes in some of its tissues, organs or processes. Hence it appears that these changes are governed by the laws of action of external agents and influences on the one hand, and by vital laws and processes on the other.

Having once established the similarity of the phenomena and processes which it is our province to investigate, we must perceive that the *mode* of our investigation must be essentially the same as in all other departments of science. And since it is impossible to acquire a complete comprehension of certain phenomena and processes in other sciences by simply looking at, or observing them, so it is with the phenomena with which we have to do. Still they are of such a nature that we may hope, sometime, to arrive at a comprehension of them by a systematic and logical investigation.

It has before been intimated, that all our knowledge must have its origin in observation and experience, and must be appreciable

to our senses; it therefore becomes requisite that our examination should extend to every particular phase of the object of our study. All this, however minute, is inadequate to give us any real insight into, or comprehension of, its real nature. All we thus acquire is, that it exists and possesses certain properties appreciable to our senses, though the mode of their occurrence, or, in other words, their causal connection and laws, are still incomprehensible to us. If we refer to the science of Astronomy for an example, we shall be convinced that all the astronomers in the world could never have gathered, by observation merely, any knowledge of the laws of motion that govern the heavenly bodies, had they watched the stars, night after night, as they rose and set, any more than the uncivilized nations have done, to this day. The physiologist, by mere observation of respiration in an animal or exhalation in a plant, could never comprehend the process. The same holds true in the phenomena noticed in watching the effect of drugs; we often observe the cure of intermittent fever following the use of quinine; bronchocele, the use of iodine; but it is impossible to say in what manner, or by what means, they were effected.

The observation of any phenomenon must be accompanied by a thorough examination and study of all modifying circumstances which can in any manner have affected its development, in what order they occur, follow each other and terminate, in reference to time and space; in other words, learn their causal connection, together with the modifying steps, and all, in conformity to fixed and definite laws. When all this has been attained, the requirements of science will have been fulfilled.

ARTICLE XIV.

VINDICATION OF ARMY SURGEONS.

BY ASHBEL WOODWARD, M.D., SURGEON 26TH REGT. CONN. VOLS.

[*Read before the Convention, May 28th*, 1863.]

THE charges of incompetency brought against the medical officers connected with our Volunteer forces, have been reiterated loudly and often. War found the Nation unprepared. At the call of patriotism, more than a million of men rushed to arms. For many years the land had been at peace. No preparation had been called forth by previous conflicts which enabled the Government to bring into the service of the country tried and experienced men. Officers like privates were drawn almost wholly from peaceful pursuits. Men unfamiliar with the alphabet of war were assigned at once to positions of high responsibility in the army.

When immense armies like those now engaged in the service of the Republic, are suddenly extemporized, it is preposterous to demand the highest order of efficiency at the outset. The science and the art of war are to be learned through the lessons of painful experience. Two years of conflict have not passed unimproved. While the people have gained immeasurably in strength of resolution and moral stature, our volunteer forces have also been moulded into well disciplined and formidable armies. The nation daily has less reason to complain of her officers, because the experiences of every day are more thoroughly fitting them for the duties of their positions.

We should naturally expect greater efficiency in the medical department of our army than in any other. The transition from civil to military practice, is far less abrupt than from the bar, the counting-house, or the legislative assembly, to the command of companies, regiments and brigades. A majority, at least of the

younger members of the profession, have been educated in excellent schools, and enjoyed the advantages of observation and study in the best appointed hospitals. Extensive acquaintance with the theory and practice of medicine is now required by our medical schools, as an essential preliminary to graduation. The standard, both of professional and general culture among the present physicians of the country, is unquestionably high.

While few men of wide experience and acknowledged skill, particularly those with families dependent on them for support, can afford to exchange the lucrative practice of large cities, for the comparatively small compensation paid to surgeons in the service of the Government, it is nevertheless true that no small number of the most skillful and honored members of the profession, have been constrained by motives of patriotism and humanity, to leave the enjoyments and profits of domestic life to minister to our suffering soldiers in the field. Discarding considerations of comfort and emolument, they have responded with alacrity to the higher call of their country. Others equally worthy have been deterred from the same course only by convictions of duty to their dependent families.

The War Department does not tempt surgeons to join the medical corps by appealing to their ambition or love of gain. It provides for only one Brigadier-General, two Colonels, and sixteen Lieutenant-Colonels in the entire Medical Department. In other departments men of less education, less experience, and assigned to the discharge of far less onerous and responsible services, are rewarded with much higher rank. In the last Congress, an attempt was made to establish a line of promotion for efficient and meritorious army-surgeons, but the project was frowned down after eliciting from members, numerous expressions of derision and contumely. Hence, high principle is the only motive appealed to, directly or indirectly, to summon physicians well established in civil practice, to accept of positions in the medical staff of the War Department.

The efficiency of any corps depends in no small measure upon the standard of qualification required for admission to its ranks. When the first levies were called into service, the regimental surgeons were not generally subjected to any form of examination. As the troops were raised and officered hastily, many incompetent

men found their way into positions of importance, where their deficiencies in knowledge and skill soon became apparent. To obviate this evil, Medical Boards were organized in a number of States, for the purpose of examining all candidates. Wherever the boards discharged their duties rigidly and impartially, the troops were furnished with thoroughly qualified surgeons. In some States, however, many months elapsed before this bar was raised against the promiscuous admission of applicants. In others, it is said, the judges were selected from political considerations, and were themselves unfit for their responsible tasks. In such cases, appointments were sometimes made in the interests of political or social favorites, and not with exact reference to the merits of the candidates. Notwithstanding such occasional deviations from the path of strict justice, a large proportion of the men at present connected with the medical staff of the army, are surgeons of science and skill, capable of discharging with credit to themselves and advantage to the service, the arduous duties which devolve upon them.

If any class of persons deserve to receive the ministrations of the best medical talent of the land, it is the brave soldiers who have relinquished a thousand familiar comforts, and exposed themselves to perils innumerable for the preservation of the country. We are happy to be able to state as our settled conviction, that sick soldiers receive as good treatment in our general and regimental hospitals at the seat of war, as they would at their own homes. Some salutary influences are of course lacking. Nothing can be substituted for the ministrations offered by the hand of affection, in the bosom of the family. There are in the simple presence and kindly offices of those nearest to the sick by the ties of nature, a moral efficacy that amounts to no less than a healing power. But to such deprivations, officers and men submit uncomplainingly. It is what each one must expect in a time of war, when the resources of a nation, in the medical as well as in all other departments, are taxed to the utmost. The soldiers are well prescribed for and carefully nursed. Hygienic conditions are as fully observed as the exigencies of the service will permit. Whatever is inevitable, our troops endure as brave men should.

Popular impressions with regard to the peculiar duties of the army-surgeon, are for the most part widely at variance with the truth. Many imagine that he is chiefly occupied in amputating limbs, probing gunshot wounds, extracting bullets, sewing up sabre cuts and dressing bruises. They always picture him as busy with the implements of his art—hardly less terrible than the weapons of the enemy. Operative surgery, however, furnishes but a small proportion of the cases which he is called upon to treat. In the army as well as out of it, the time and energies of the medical department are mainly devoted to the treatment of diseases. In many regiments and brigades, less than five per cent., of all the patients taken to the hospital, require surgical assistance. The well being of the sick, therefore, depends on the skill of the physician as a practitioner of medicine. His duties in the camp are for the most part similar in character to those which absorbed his attention while engaged in civil practice. All the information acquired in the previous rounds of his labor, every case carefully studied and skillfully managed, helped to contribute the very capital most needed in his new sphere of action. Hence it will be seen that the transition from civil to military practice in the department of medicine, is far less abrupt than is generally believed. One is the stepping-stone and fitting preliminary to the other. While in other departments—from the immense magnitude of our armies and the necessity of taxing heavily the intelligence of the land to find the men fitted by nature to guide its movements—many officers, drawn from the common pursuits of life, are confronted with strange responsibilities and brought face to face with unfamiliar duties, the surgeon on the contrary is perfectly at home from the start. This fact furnishes strong presumptive evidence at least, that the obligations devolving on the medical staff are likely to be met with more promptitude and discharged with more efficiency than in almost any other branch of the service.

The operations of the Federal armies extend over so broad an area, embracing such vast diversities of soil and climate, that surgeons in departments distant from their homes, are continually confronted with new forms and modifications of disease. The malarial poisons in the fertile districts bordering on the Mississippi constitute a prolific source of mischief, with the phenomena of

which practitioners from many sections of the country have had little practical acquaintance. It not only gives rise to a specific class of fevers, but also oftentimes impresses a peculiar character upon a great number of the maladies to which the human system is subject. Other subtle peculiarities of atmosphere arising from the action of the excessive heat upon the rich acres of the South, and from a variety of impalpable telluric agencies, likewise modify the type of familiar troubles. It is obvious that the practitioner must vary his accustomed modes of treatment to meet adequately the responsibilities of his new situation. A dull, lifeless routine would betray him into constant errors. Quickness of discernment, promptitude of decision, accuracy of judgment, and skill in applying established principles to new cases, are all essential to success. The more fully the surgeon possesses these powers the more useful he becomes in the distant departments of the army. Even the most sagacious, however, cannot in the few months of their sojourn in remote and insalubrious localities, overcome all the embarrassments incident to the situation. Hence the transferrence of medical men from one part of the country to another, imposes difficulties upon them which may temporarily impair their efficiency. Other things being equal, the physician is more certain of success on his own territory and amid familiar surroundings.

Loud complaints have been made, and not without a show of reason, that after engagements, amputations are often recklessly performed by unskillful and inexperienced men. It is asserted that many are thus needlessly maimed for life. We do not deny that the charge in some cases is well founded. In the early stages of the war, before the medical corps had been thoroughly organized, important operations were undertaken with much less discrimination and forethought than at present. But with the growth of experience, every possible precaution has been adopted to prevent unnecessary mutilation.

The percentage of mortality following grave operations, is considerably heavier in our military hospitals than in civil practice. Yet this fact by no means justifies the conclusion that the army surgeons are to a corresponding degree, less judicious and skillful. They are beset by extraneous difficulties which often thwart their best efforts to save the wounded. Embarrassments peculiar to

their position, crowd upon them heavily. When from injuries or disease it becomes necessary to operate upon a patient at his own home, or at the hospitals of our cities, it is almost always practicable to bring him by diet and medication to that condition of body best calculated to prepare him to meet and survive the shock. On the battle field the case is far otherwise. When hundreds are falling, a medical staff, limited in number, cannot examine each subject with exhaustive thoroughness. Scores require immediate assistance. Great quickness of judgment and celerity of movement are demanded. It is one of the unavoidable ills of war that the wounded are subjected to extra pains and extra perils. They are often stricken down when exhausted by protracted hardships, or when the vital fluids are impoverished by unwholsome food. Not unfrequently the sufferer lies for hours upon the field of carnage before relief reaches him. The sun or the storm may beat upon him, increasing his tortures, and making heavy drains upon the vital forces. The length of the interval between the injury and succor—the accidents of heat, or rain, or shelter—may decide the issue of life or death. Over such contingencies the surgeon has no control. He receives the wounded as they come. Any reasonable person must perceive at once, that operations performed under circumstances so disadvantageous, must involve unusual peril. If failures occur when knowledge and skill have exhausted their resources, let them be assigned to their true causes. Let them not be made the texts for senseless vituperation.

Again, the duties required of the surgeon, if faithfully discharged, oftentimes bring him into disrepute with the men. Some of these duties, as stated in the Revised United States Army Regulations, are as follows.

"At Surgeon's call, the sick then in the companies, will be conducted to the hospital by the first sergeants, who will each hand to the surgeon in his company book, a list of all the sick of the company, on which the surgeon shall state who are to remain or go into hospital; who are to return to quarters as sick or convalescent; what duties the convalescent in quarters are capable of; what cases are *feigned;* and any other information in regard to the sick of the company he may have to communicate to the company commander."

The surgeon's decisions upon all these points are supreme. There is no higher tribunal to which the soldier can appeal. In passing judgment, the conscientious surgeon must stand faithful to the government on the one hand, and do impartial justice to the applicants for relief on the other. It is his duty to see that the service is not fraudulently deprived of the time and efforts of the soldier under pretense of sickness. He is equally bound to see that the really sick are not returned for duty. If a doubt exists in his own mind as to the fitness of the person under examination for the discharge of his appointed services, he almost invariably allows him the benefit of the doubt. In this way, all injustice is avoided.

Many present themselves as on the sick list, not because they are actually laboring under disease, but because they wish to shirk the labors required of the well—in short, to impose their own share of guard, and other duty, upon their comrades. The surgeon readily discovers the deceit and of course thwarts its purposes. The dishonest and lazy soldier is sent to his appointed task. He seeks revenge in denouncing the officer who has frustrated his schemes and tacitly exposed his duplicity. In conversation, in letters to friends, and not unfrequently in communications to the press, he gives ventilation to his rage. The surgeon perhaps is denounced as a tyrant and an imbecile, and in the minds of the thoughtless, prurient sympathy is excited for the victim of his imaginary cruelty.

Nor are the cowards and the shirks who seek to avoid their duties by claiming the privileges allowed to the sick, as rarely met with as we might hope. When men are taken promiscuously from the community, and removed from the restraining influences of home and society, they too often fall to a lower plane of morality and aspiration. While many—to their credit and to the glory of our common humanity be it spoken—encounter the hardships of the service unflinchingly, meet dangers with unfaltering courage, and bear sufferings without a murmur, others never rise to the level of true manliness. Fertile in low expedients, ingenious in fabrications, and dead to the impulses of generous pride, they confine the exercise of ambition to the contemptible task of securing safety and ease. Such individuals have little respect for justice in the abstract, or for justice embodied in the persons of their supe-

riors. Supremely selfish and hopelessly debased, they stand ready to reward with empty plaudits whoever will wink at their deceptions, and to condemn in terms of unmeasured abuse the officers who compel them to discharge their duties. A few men of this stamp in a regiment are capable of doing great mischief. "One sinner destroyeth much good." The leaven of falsehood works with hardly less potency than the leaven of truth. Lies, persistently stuck to, and industriously circulated, seldom glance altogether from their victim, without leaving a mark behind. All officers are liable to be wronged in this way, and surgeons peculiarly so.

Able bodied soldiers, laboring under no trouble unfitting them for the service, often besiege the surgeon to obtain assistance in procuring discharges. After giving them a thorough examination, he declines to become a party to any such scheme. The disappointed applicant takes revenge by denouncing the officer who has frustrated his villainy. Distant friends are written to, and their sympathies enlisted. Where numerous coteries, scattered here and there over the land, accept one-sided testimony for truth, the aggregate of falsehood thus believed and of injustice thus done, swells to fearful dimensions. The writer is happy to say that little of this querulousness and fault finding, has fallen under his own observation. Extensive inquiries, however, have adduced a large amount of concurrent testimony—all tending to show that faithful surgeons as well as other officers have for the time being suffered in reputation, from the mis-statements of soldiers whom they have balked in their attempts, either to evade their duties, or to escape from the service. It is this complaining, petulant, excrescent portion of the army, including occasionally officers as well as privates—men who nowhere and never, even under the most favoring circumstances, discharge with zeal and alacrity the duties of a soldier—a class of persons with which every body of troops is more or less scourged; always a trouble in the camp and a burthen upon the hospitals; it is from such and such alone, that the competent and faithful surgeon suffers in reputation.

But it is fortunate for our cause, and it will redound to the everlasting glory of the land, that our armies are composed mainly of earnest, honest and patriotic citizens, who treat their friends as

they fight their enemies, with a stern regard to justice. Contending not for conquest but for national unity; striking not to injure or oppress their fellow-countrymen, but to bring them back to allegiance and the full participation in equal rights; impelled by the loftiest motives to exchange the familiar implements of toil for the weapons of war; they are, from innate nobility of nature, rendered still more noble by frequent deeds of self-sacrifice and heroism, both generous to fallen foes and true to one another. They properly appreciate the efforts of impartial and faithful officers in all departments of the service. No one is in danger of injustice from the sturdy men who constitute a large majority of our army. Ready themselves to meet with fortitude every requirement of the service, they are also ready to respect and honor every officer who manifests the same qualities in the discharge of his obligations.

The army is the best school for the improvement of surgery, that the profession has had in any age or country. Surgery hardly existed in a form worthy of the name, on the Western Continent, till the protracted struggle of England and the Colonies against France, educated numbers to great skill in this important art. The Revolution also, following closely upon the heels of the campaigns that for a long period were almost annually renewed along the frontiers, had a most salutary influence in elevating the profession in America to a far higher standard of excellence than it had succeeded in attaining before. The same general principle has been equally true of other nations. The advantages thus accruing to medical sciences, constitute one of the few ameliorating and beneficial concomitants of war. When the dark clouds which now overhang our own beloved country break away, when peace returns to our fields and firesides, God will no doubt teach us, in his own good time, the wise and beneficent ends to be wrought out eventually through this terrific tragedy. Meanwhile, each in our own sphere, let us perform the duties allotted to us manfully, and with humble trust, leave the results with Him.

CAMP PARAPET NEAR NEW ORLEANS,
April 15th, 1863.

ARTICLE XV.

CALOMEL IN SCARLATINA.

BY EBENEZER K. HUNT, M.D., OF HARTFORD.

[*Read before the Hartford County Medical Meeting, April* 29, 1863.]

In calling your attention to the topic suggested in the above title, my object is not to claim for Calomel a specific virtue in any of the various forms or manifestations of Scarlatina; much less to affirm that it will rescue from the grave, those on the one hand, who are overcome as some apparently are, by its terrible onset, nor on the other, those who suffer from its many dangerous sequelæ.

It is rather to contemplate some of the benign and salutary effects which this agent is believed to produce when early and judiciously employed, upon the character, course and termination, of this very prevalent, and always dreaded disease.

Theoretically, we regard it, like other contagious diseases, as originating in a virus in some way received into the system if not developed therein, whose presence gives rise to a series of morbid phenomena which usually pursue a course extending through about seven days; leaving some times, only the languor and prostration which must inevitably ensue from its slightest reactions,—and at others, those ravages more or less formidable which might rationally perhaps, be expected to follow the sudden and violent perturbation which too often marks the course of the malady.

The practical question which it is proposed to consider is, whether, by the timely and judicious use of Calomel, the phenomena referred to may not be conducted, not to a speedier, but to a safer and more auspicious conclusion.

It is unnecessary to say, that its use need not interfere in any wise, with that of other medicinal agents which the exigences of the case may at any time require, but should rather concur with

other appropriate means, while the process of elimination is going on, to equalize and restrain violent arterial action, reduce the extreme heat, and control undue nervous irritation; all of which usually exist in greater or less degree, and involve risk of damage to some portion or other of the delicate machinery of the body, as well by their direct and positive consequences, as by the weakening, and increased susceptibility of organs and parts, necessary, if not to life, at least to the healthy and proper performance of highly important functions.

Indeed, I should regard the same principle involved, and its suitableness equally clear, in numerous other forms of disease where Calomel is used to assist in controlling inflammatory action, promote secretion, and maintain the healthy action of all eliminating surfaces and bodies.

The importance of accomplishing these latter objects, we shall more fully realize, perhaps, by recurring briefly—first, to the office of the glandular system, as well as to the anatomical constitution of the organs themselves which form it. All of them, as is well known, are highly vascular, being made up to a great extent of blood vessels, tubes to convey away the products of secretion, a parenchyma little more than sufficient to hold them compactly and securely in their places, and nerves, to preside over and control their respective functions. Though they all, doubtless, have their seasons of comparative activity and rest, it is probable that none of them, in a state of health, are ever actually quiescent; while the collective products which it is their province to secrete and discharge, are known to be both large, and in the case of many of them, highly complex. Its importance may be further remarked, by calling to mind the fact, secondly, that the retention in the system, of many of the products eliminated by glandular action, is in its results, the same as introducing through the stomach or any absorbing avenue, a virulent poison, which soon profoundly oppresses the brain and nervous system, and assuredly destroys life, unless its accustomed, or some other safe channel of exit, is quickly provided for its escape.

Again, its importance is made apparent, by the consideration of the consequences purely mechanical, which will be likely to ensue from interference with the free flow of the blood through its accustomed channels. A check at any one point, which controls a con-

siderable volume of the circulating fluid, becomes at once, a dam, more or less complete throughout its entire circuit, as well between the point of obstruction and the heart, as beyond; every structure will feel its effects, the more, in proportion to its vascularity, both by the strain to which it must give rise upon its delicate tissues, and also, by the impediment which this congested state will occasion, to the fulfillment of its appropriate functions.

If to this embarrassment, there be added the further inconvenience and risk which must necessarily follow—under the circumstances supposed—from the increased force of the circulation, which usually, though not uniformly by any means, exists throughout the active stage of febrile maladies, we cannot fail to perceive how disastrous to the delicate and complex structure of the glands and other highly vascular tissues and organs, must be any considerable hindrance to the free flow of all the vital fluids.

In no disease perhaps, to which the human organism is liable, is the arterial reaction more sudden and violent, and the impression upon the nervous system more profound, than is often, I may say in a majority of cases, experienced in Scarlatina. In none, are the secretory organs and surfaces put to a severer trial; in none is it more important to keep all the channels of secretion open and free, both for the protection of the machinery itself, and for the sake of eliminating, in the most prompt and ready manner, their respective products.

This I conceive would be sound doctrine, were these secretions healthy in character; but when it is considered that the reverse is true, probably as to every one of them, and that in this disease above all others which we are accustomed to treat, these products are noxious in character, so much so as to damage by their presence even, the surfaces upon which they are thrown, the argument in favor of keeping every avenue of egress free, becomes incontestable.

This view, in its bearing upon the use of the drug in question, is further strengthened however, if it be true, as has been asserted by some whose opportunities for observation entitle their opinion to much weight, that the troublesome sequelæ of Scarlatina have been of late years on the increase, so much so that they have become rather the rule, than exceptional occurrences only; and it has been

observed that this feature of the malady has seemed to date from the time when it became somewhat fashionable, or at least customary, to dispense in large degree, if not entirely, with the use of Calomel in its treatment.

Taking this disease then, as we usually find it, what article, regarded on purely theoretical grounds, more happily meets the indications presented by it, than the one in question? Though in a sense, a universal stimulant, it may easily be so employed as not to increase the force of the heart and arteries, nor add in the slightest degree to the disturbance of the nervous system, while, by common consent, its action upon every secreting surface is the most effective of any medicinal agent.

Yet in general it may be said, that it is only during its acute stage, while the virus is working its latent but lasting changes in the system and the struggle for its elimination is going on, that the frequent use of Calomel is demanded. So violent however, is the reaction that often takes place, that a few hours frequently suffice, if it be not successfully resisted, to work irreparable injury to parts of the highest value to the individual, if not indispensable to life itself.

It seizes upon the system, as the hurricane falls upon the luckless ship in mid-ocean, which, unless every sail is furled and every spar set to offer the least possible resistance to the gale, and there is a skillful pilot constantly at the helm, must go down.

It becomes then eminently proper, if the foregoing views are correct, to begin at the outset of the disease, with the use of this potent remedy. An emetic of Ipecac, for which, if the arterial excitement is strong and the skin hot and dry, Tart. Antim. et Potassæ may be substituted, combined with from four to six grains of Calomel for a child from four to six or eight years of age, may be given as soon as the disease becomes manifest. Nor, let me observe, would it in my opinion, be bad practice, even in those cases which at the outset are obscure and often simulate those ephemeral maladies to which childhood is so subject, to administer the combination just named, even though the result of the case should demonstrate that less active agents would have answered equally well. Time is often exceedingly precious in Scarlatina; and upon the right beginning of its treatment frequently hinges the well-being, and life even, of our patients.

To proceed: The use of the combination above named, will usually, thoroughly evacuate the stomach and also produce one or more alvine discharges; quickening at the same time, the actions of the entire glandular and follicular system. Its revulsive effect will also be salutary; tending, as it will, to secure and maintain cutaneous transpiration and a proper equilibrium of the circulation. Subsequently, the mercurial should be employed so as to move the bowels once or twice every twenty-four hours. This may be done by combining it in doses, say of gr. ½ to be given every four hours, with some appropriate refrigerant or anodyne remedy, adding to this, morning or evening, or at both those periods if found necessary, some two grains, to be given at a single dose. This will generally maintain, throughout the whole course of the disease, free secretory action from all eliminating surfaces and keep the bowels in a sufficiently open and soluble condition.

Cooling and febrifuge remedies, like the Spt. Æther. Nit., the neutral or effervescing draughts, sponging the surface freely with cold or tepid water, and its free use as a drink, if preferred; also, such topical remedies as may be indicated, are all proper and often doubtless needful when the reaction is considerable, and should be used, as circumstances require.

In those cases also in which the oppression of the brain and nervous system is well marked, but not extreme, and the reaction but moderate, I generally resort to an emetic, in conjunction with a few grains of calomel at the outset; and am governed subsequently by the degrée of reaction which follows their use, as to the further continuance, as well as to the quantity of the latter. Though a careful discrimination, and indeed extreme caution are peculiarly needful in this form of the disease, I have rarely if ever found, when these agents were deemed proper, that their use increased the unfavorable symptoms, but rather seemed to be entitled by their peculiar stimulant and revulsive properties to quite as much credit as other means employed, in bringing about a wholesome reaction and aiding the powers of the system to cope successfully with the disease. May I not add, that without the mercurial, in many instances, other means would have proved unavailing; that indeed it was the union of the two, that produced the result sought for. It cannot properly be objected to this remedy, nor will it be I am sure,

by the profession, that its persistent use as above recommended will be followed by ultimate inconvenience or injury to the patient. It is for a few days only, that its continuous use is recommended, or indeed allowable; after which, its occasional employment, and that generally as an alterative only, is all that is required. It avails nothing towards *repairing* the damage often done to the organism by this disease; and it is especially to be observed, that under these circumstances, its persistent administration could but increase the mischief already produced.

For the functional disturbances which sometimes follow, weeks even, after the disease itself has passed away, but which after all, are held—and justly—to sustain a relationship thereto, though probably no nearer than that to which an increased susceptibility to external impressions, such as that of cold, irregularities in diet, etc., might give rise,—for these, the mercurial may be employed precisely as if the same indications for its use had occurred under any other circumstances.

Finally, it would be dealing unphilosophically, both with facts and all experience, to pretend that there were no cases in which Calomel was inadmissible. Excessive irritability of the bowels sometimes; a peculiar nervous irritation which in some constitutions always accompanies the use of mercurials; positive nervous prostration owing to the shock incident to the onset of the disease, or to the oppression apparently due to the influence of the virus upon the brain and nervous system; and sometimes other causes, may for a time, and perhaps throughout the usually active stage of the disorder, contra-indicate its employment. Such cases however, happily, constitute but an insignificant fraction of the whole number, and are always formidable under any plan of treatment.

The use of Calomel in Scarlet Fever, may possibly be more general than I have supposed; and the reasons for its use herein assigned, or other and better ones, may prevail among the profession. If so, no harm will result from making it the topic of consideration in this brief paper. But if on the contrary, there be a difference of opinion on the subject, its discussion cannot fail to prove serviceable; and if further, it should appear that with many, if not with a majority of our members, this agent is made to play a subordinate part, if indeed it be not wholly omitted in the treatment of this disease from the

fact, that for some reason scarcely known to the practitioner himself, he is not in the habit of using it, that it is not fashionable, or the fear of disturbing popular prejudice, or all of these combined, I can but think, that much good may be done by calling attention anew, in the way I have here attempted to do, to the subject.

Popular prejudice as it relates to medicine, originating principally in the arts of Empiricism or through the instrumentality of those who make merchandise, as it were, of the public health by the manufacture and sale of the nostrums of the charlatan; and to some extent does the same baleful influence often deter the hesitating and timid practitioner from the employment of some of the most valuable articles of the Materia Medica—agents which commend themselves to his good sense and experience, but which he is unwilling to use lest some untoward result following, it be charged —be the cause what it may—by the ignorant, prejudiced or designing, upon this unfortunately obnoxious remedy; and his interests and reputation suffer in consequence. The fear of its causing diseases of the eruptive class to strike in, in the language of the vulgar, is a bug-bear which has had quite too much influence on the minds of the better informed—possibly upon the professional mind. Physicians, especially when the grave responsibility involved in the care and treatment of this disease is assumed, should be governed not by such fears, but by the decisions of a sound judgment and the established maxims of the profession.

I am by no means inclined to disparage in this day and age, the employment of a reasonable caution, nor to claim that the exercise of a wise discretion is not at all times to be commended. It will however be admitted by all, that there is a wide range between a weak and unbecoming fear of popular disfavor on the one hand, and headlong rashness that takes no thought of consequences, on the other. *In medio tutissimus ibis.*

ARTICLE XVI.

PHYSIOLOGY OF THE CRYSTALLINE LENS,

OR ADJUSTMENT OF THE EYE TO DISTINCT VISION AT DIFFERENT DISTANCES.

BY MOSES C. WHITE, M.D., OF NEW HAVEN.

[*Read before the New Haven County Medical Meeting, April* 9, 1863.]

[In examining the microscopic structure of the Crystalline lens, I have for several years adopted and advocated a theory of its physiology quite different from the (to me unsatisfactory) views advanced by any English authors of my acquaintance. I have recently found my own views of the uses of the fibrous structure of the crystalline lens so clearly stated and ably defended by P. A. Daguin in his treatise on optics, that I have thought it might be interesting to translate it, and bring the subject before by professional brethren in an English dress, with a few brief additions derived from my own observations and reading of different authors.]

It has long been considered an interesting question to determine how the eye is adapted to distinct vision at different distances. Physiologists and physicists have proposed numerous theories to account for the well known fact that some change in the condition of the eye takes place, when, after observing distant objects, we fix the eyes intently upon objects very near.

1st. Kepler, Boerhave, Rohant, Olbers and others, have thought that the globe of the eye is elongated by lateral muscular compression to adapt it to distinct vision of near objects. But while Rohant attributed this change to the oblique muscles and the contrary effect to the recti muscles, Olbers, followed by Home, Englefield and Ramsden, attributed the reverse effect to these different muscles. But changes in the length of the eye cannot take place without modifications in the curvature of the cornea, and we shall soon see that

there are no such changes in the cornea. Finally, this question is set at rest by an observation made by Groesse who has seen a man in whom the muscles of the eyes were paralyzed who continued to have distinct vision of objects at different distances.

[It is well known that partial paralysis often occurs in patients recovering from diphtheria. Nov. 17th, 1862, Dr. C. A. Lindsley reported to the New Haven Medical Association a case of presbyopia occurring in a child only 8 or 10 years of age after diphtheria. The child could not see objects distinctly without holding them at arms length. There was no paralysis of the muscles which move the eye, but yet the power of adjusting the eye to distinct vision at different distances was lost for the time. May 18th, 1863, Dr. S. G. Hubbard reported to the New Haven Medical Association two cases of presbyopia in patients 8 or 10 years of age, which followed diphtheria after symptoms of paralysis had appeared about the throat. There was no paralysis of the muscles which move the eye. These patients recovered the power of adjusting the eye by the use of tonics. At the same meeting, Dr. E. A. Park reported a similar case of presbyopia which occurred in a lady (the mother of a family) a week after recovery from diphtheria. At night she could see perfectly well at ordinary distances, but the next morning she was totally unable to see near objects except by the use of glasses adapted to the eyes of an ordinary person 50 years of age. There was no paralysis of the muscles which move the eye. These cases appear to show conclusively that adjustment of the eye to vision at different distances is not effected by muscular compression of the eyeball.]

2nd. Kepler supposed that the crystalline lens is displaced by the ciliary processes in such a manner that it is brought nearer to, or removed to a greater distance from the retina.

Although this view was adopted by Scheiner, Plumbius, Jurin, Poterfield, Zinn, Camper and others, it cannot be supposed to take place without a change in the pressure of the humors of the eye on one side or the other, and consequently a change in the curvature of the cornea. Still more, the ciliary processes do not present any indication of being adapted to perform the function thus attributed to them.

3rd. Jurin, Mile, Muschenbrock and others admitted changes in the curvature of the cornea combined with variations in the breadth

of the pupil. But numerous experiments, made by Hyoung, upon the eyes of individuals having very good vision, have proved that these apparent modifications of curvature do not take place. The head of the individual being well fixed, Hyoung measured with a telescope micrometer the distance of the images of two rods, reflected by the brilliant surface of the cornea, while the individual observed successively objects placed in the same direction, at very different distances, and he found that the distance between the images was unchanged. Duges, De Haldt, Crumer and the Messrs. Senff and Hemholtz, arrived at the same result. Finally, Hyoung was able to see clearly, objects situated at *different distances*, through a metallic tube filled with water, (a liquid having almost exactly the same refrangibility as the aqueous humor,) with the cornea of his eye plunged in the water, so that it annulled completely the influence of the curvature of the cornea.

4th. A theory which for a long time enlisted a great number of advocates, attributes the adjustment of the eye to changes in the pupil, combined with the peculiar structure of the crystalline lens. Lahire, Leroy, Haller, Sabbatier, Treviranus, and lastly Poullet, have adopted and developed this hypothesis. Treviranus undertook to sustain it by mathematical considerations, and endeavored to demonstrate that the crystalline lens being composed of layers, augmenting in density from the surface towards the centre, ought to produce images at a uniform distance if the border rays are excluded more and more as the distance of the object decreases. Poullet, after having observed that the layers of the crystalline lens differ not only in density, but also in curvature and in thickness, considered this organ as a lens having a great number of different foci, the shorter of which are formed by rays which are transmitted near the centre, and the longer foci by those rays which pass near the borders. Thus when we look at a point very near, the image of which tends to be formed behind the retina, the pupil contracts and the rays pass through the more refracting portions of the crystalline lens, and are brought to a focus upon the retina. On the contrary, when we look at a distant object the eye tends to form an image before the retina; but when the pupil is dilated, the rays which traverse the crystalline lens near its borders, in the parts which refract less, form an image at a more remote distance, that is, upon

the retina. Rays which pass near the axis come to a focus in front of this membrane, but as they are less numerous than those rays which pass through near the border they cast a diffused light upon the image and merely diminish its brightness without injuring its clearness.

Duges brought against this theory certain experiments, which prove that vision at different distances does not depend absolutely upon the size of the pupil. For example, we see distant objects clearly with the pupil contracted, if the objects are well illuminated, and with the pupil very large we see near objects distinctly when they are feebly illuminated. If we fix the eyes upon a bright but distant object, and then suddenly look at a dark object near by, we may by the aid of a mirror see the pupil enlarge. We ought thus (according to the above theory) to be shortsighted on a bright day, and longsighted on dark days, since a vivid illumination determines the contraction of the pupil. But every one knows, on the contrary, how easy it is to see at great distances during the bright days of summer.

5th. All the preceding theories of the adjustment of the eye to vision at different distances being excluded, it remains to consider the *crystalline body* as a LIVING LENS *capable of changing its form and focus according to the distance of objects.*

Descartes, Suavage and Bourdelot were the first who sought to explain the adjustment of the eye to vision at different distances by changes in the crystalline lens. Home, Pemberton, Albinus and Hunter adopted the same opinion, which was taken up and developed by Hyoung in a remarkable memoir published in the Philosophical Transactions for 1801, and since confirmed by the researches of Arago, Duges and others.

To prove that the crystalline lens is capable of changing its form or density by its own action, it is necessary to show first that despite the special nature of this organ, and the perfect transparency of every part, it is still organized and living, and not a simple product of secretion. Duges lacerated the crystalline lens in a live rabbit, being as careful as possible not to injure the capsule of the lens, and after a few weeks he found that the wound in the lens had cicatrized. Zinn has seen an injection penetrate by two branches of vessels into the crystalline lens of a calf, showing that it has vessels like all living parts.

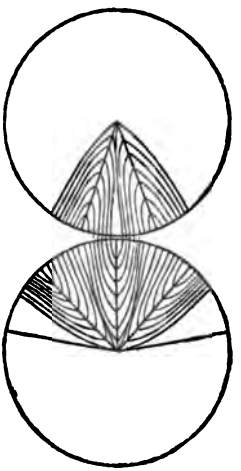
[It has long been known that the capsule of the crystalline lens is well supplied with blood vessels from a branch of the central artery of the retina, which passes directly forward through the vitreous humor to the posterior surface of the capsule of the lens.

It has been demonstrated that the capsule adheres to the lens very firmly at certain points. (Todd's Cyclopedia of Anatomy.) Dr. Young found ramifications upon and within the substance of the lens from the points of adhesion to the capsule, and he considered these connections to be due to the presence of arteries and nerves entering the substance of the lens. The great size of the vessels distributed on the back of the capsule favors the conclusion that the lens is furnished with vessels like the rest of the body. If the lens is penetrated by arteries it must (judging from analogy) be supplied with nerves also. It only remains for some persevering anatomist to repeat the experiments of Zinn and inject the lens itself to remove all doubt upon this subject.]

Structure of the Crystalline Lens.—Hyoung demonstrated that the crystalline lens is composed of transparent fibres. Hunter observed the same fact, and Leuenhock delineated the forms of the fibres found in the eyes of fishes. To see well the structure of the crystalline lens it should be macerated for a considerable time in warm nitric acid, which hardens it and makes it white upon the surface but yellow and transparent in the interior. The fibres are then very distinct, easily separable and similar to unbleached silk. According to Berzelius they are composed of a substance similar to that which is obtained by submitting albumen and fibrin to the action of nitric acid. It is coagulated by the action of heat and nitric acid, and has a remarkable resemblance to the flesh of fishes.

What is now the arrangement of the fibres? It is somewhat complex and at the same time very regular. Duges discovered that they form many layers placed one above the other. The exterior layer psesents sixteen radiating sutures, visible with a glass after the lens begins to be coagulated by the action of alcohol. The sutures are formed by the union of fibres which meet each other very obliquely. The positions of these sutures do not correspond on the two faces of the lens; on the contrary they alternate, each fibril as it passes form one face of the lens to the other curves around upon the borders of the lens somewhat in the form of the letter S, as

shown in the accompanying figure. At the meeting of the star-shaped sutures we find a considerable quantity of fine granular matter. [We find the same granular matter between the external fibres after hardening by acid or by boiling. According to Henfry, the external fibres when cut, exude a tenacious sarcode substance. This is questioned.] Those fibres which commence near the centre of the anterior face terminate near the border of the posterior face, and those fibres which commence near the border of the anterior face terminate near the centre of the posterior face. The interior laminæ have their fibres arranged in the same manner, except that the sutures appear to diminish in number. At the centre, there are only three sutures. The crystalline lenses of the ox and of the sheep have each, only three sutures upon each face, those upon the posterior alternating with those upon the anterior surface. The crystalline lens of the rabbit has but one suture. In the lens of the human fœtus there are but three sutures, in that of the adult there are from nine to sixteen, some of which are more distinct than others. In some animals, as the codfish, triton and salamander, the sutures radiate from an anterior and a posterior pole, like meridians.



The regular arrangement of the fibres of the crystalline lens leads us naturally to compare it to a muscle. This comparison is confirmed by many considerations. The fibrillæ of the crystalline lens very much resemble the radiating contractile fibres of the iris; like the latter they are linear or moniliform.

[The fibres of the crystalline lens are very long, flat, six-sided, transparent, from 1·4800 to 1·2400 of an inch in breadth, and 1·8500 to 1·1300 of an inch in thickness, united by their edges into thin laminæ which envelop the lens, one lamina over another, the broad surfaces of the fibres being parallel with the surface of the lens. The edges of the fibres are rough, and in fishes, distinctly serrated, so that a lamina of the lens of a codfish exhibits beautiful transverse or oblique striations, very analogous to true muscular fibres. The inter-

locking of the serrated edges of the fibres will cause the lens to contract regularly and prevent the fibres from gliding one upon another.

The appearance of the fibres of the crystalline lens of the codfish, is shown in the accompanying figure. Fibres from the crystalline lenses of the mammalia present transverse corrugations not so strongly marked as the serratures here shown, yet sufficiently distinct to suggest the idea that they are contractile fibres. Finally, the crystalline lens is imbued with a fluid which when submitted to the action of heat, forms a mass like the clot of blood, from which it can only be distinguished by the absence of color. This fluid is probably uncolored blood or transparent blood plasma, which flows through vessels ordinarily invisible and which is designed to form and nourish colorless and transparent fibrous or muscular tissue.]

The structure and chemical composition of the crystalline lens as above described, authorize us to regard it as susceptible of undergoing contractions which change its form and density, and consequently change its focal distance. These modifications take place under the influence of the will by the effort which is made to distinguish objects clearly.

The theory which attributes the adaptation of the eye to distinct vision at different distances, to contractions of the crystalline lens is very satisfactory. Some facts have been observed which tend to confirm this theory.

1st. When blindness caused by cataract has been removed by depression of the crystalline lens, the subjects are not able to see clearly at different distances, although some have affirmed the contrary. The absence of the crystalline is supplied by a converging lens placed before the eye, but vision is distinct only at a determinate distance, which depends upon the focus of the lens.

2d. The habit of constantly looking at objects very near, renders people short-sighted, as frequently happens with watch makers and engravers. The crystalline lens thus acquires a great and permanent convexity, which proves that it becomes more convex when we look at objects very near. Long-sightedness on the contrary, shows itself for the most part in aged persons, the power of contractility diminishing in the crystalline lens as in all other parts of the body;

the organ then remains as it ought to when it has not made efforts to observe near objects, and in the end it is no longer obedient to such efforts. The rarity of the humors also tends to produce thinness of the crystalline lens. The only objections which have been made to the theory here explained, are based upon negative facts. Thus they mention the fruitless efforts which have been made to excite contractions in the crystalline lens by means of electricity. But this fact proves nothing; for in the first place the interlaced fibres may undergo contraction without any *obvious* alteration of form; it is also possible that the irritability of this sort of fibre ceases almost immediately after death. Although the circular and radiant fibres of the iris contract after death under the influence of electricity, they do not contract quickly like ordinary muscular fibres, but they contract with characteristic slowness. From this fact we may learn that we ought not to expect to find in the transparent fibres of the eye the same rapid contraction under electrical excitement as in the fibres of muscles properly so-called.

To remove all doubt from this subject, we come now to prove directly that the crystalline lens undergoes modifications to adapt it to distinct vision at different distances.

Changes observed in the crystalline lens.—Recently, two physiologists, Cramer in Holland and Helmholtz in Germany, each independent of the other, have pointed out changes of the curvature of the crystalline lens. (See Bibliothéque Universelle de Genéve, Arch. des Sc. Phys., t. 1, 1858, p. 71.) The following is their method of experimenting. They bring a candle near to the eye of a person placed in a dark chamber, while he is looking intently upon a distant object. Three images of the candle are seen; the first is an erect virtual image formed by reflexion from the cornea; the second is also erect and placed behind the first, it is formed by reflexion from the anterior surface of the crystalline lens; the third, smaller and inverted, is a real image produced by the posterior surface of the crystalline lens acting as a concave mirror. These images should be observed with a lens placed in the end of a tube. This lens ought to be placed at different distances to view each of the three images clearly. If the person employed for the experiment is then made to look at a near object, all at once the second image is seen to advance toward the first, which does not

change its position. At the same time this second image is brighter and smaller than before. This indicates that the anterior surface of the crystalline lens has become more convex. The third image does not appear to change its place, but as it becomes also brighter and smaller, it is proper to conclude that the posterior surface of the crystalline lens has also become more convex.

[These remarkable experiments remove all doubt about the action of the crystalline lens, and establish the position, that: *The principal modification of the eye, to adapt it to distinct vision at different distances, consists in changes in the form of the crystalline lens, and it seems almost certain that these changes are produced by a vital contraction of the fibres of which the lens is composed—the fibres of the crystalline lens being endowed with the power of contracting and changing the form of the lens in obedience to the will.*]

ARTICLE XVII.

SANITARY REPORT OF HARTFORD COUNTY.

BY LUCIAN S. WILCOX, M.D., OF HARTFORD.

[*Read before the Hartford County Medical Meeting, April* 29, 1863.]

MR. PRESIDENT AND GENTLEMEN:

At our last annual meeting, several reports were made to this body, which have proved markedly typical of the character of the diseases that have prevailed, somewhat extensively, throughout the county during the past year. They gave no very obscure intimations of an epidemic influence that had touched several communities and led the observant physician anxiously to inquire whether a new disease power was abroad, or an old unwelcomed visitant had come again. Diseases of known form and name indeed, were prevailing, but mysterious manifestations were impressed upon them, and in some instances so enwrapped in black pall the disease, that the mystery was the disease, and death, the first symptom. These cases of undeveloped disease were isolated and not numerous, but they proved in no long time to have been forerunners of diseases, chiefly of the Zymotic class, of unusually severe character, and too often, of fatal termination. Inquiries arose as to their character and tendency, and speculations multiplied. Some of the older physicians suggested "Spotted Fever."

The suggestion was certainly not unreasonable, and perhaps some may discover a parallelism in the line of symptoms as run out by observers of the old spotted fever epidemic, and these recent cases. Thus Dr. Hall, writing in 1810 on the epidemic of the preceding year, quotes Dr. Woodward, in the following description: "The violent symptoms were great lassitude with universal pains in the muscles; heats, if any, of short duration;

universal prostration of strength; delirium with severe pain in the head; vomiting with indescribable anxiety at the stomach; eyes red and watery and rolled up, and the head drawn back with spasm; pulse weak, quick and irregular; petecchiæ and vibices all over the body, and a cadaverous countenance and smell."

Dr. North, in the "Medical Museum," mentions the following symptoms: "Pain in the head, more commonly the back side, slight chills, furred tongue, great prostration of strength early in the disease; loss of appetite, though less than in other fevers; vomiting and purging sometimes; distress about the precordia; pains of the limbs frequently; sometimes slight cough; pulse generally weakened and quick, sometimes full but never hard; some had little or no febrile heat; others had great heat and high fever; most had slight sore throat at the beginning of the complaint. The spots were not a constant nor frequent symptom, and when present were of various sorts, some resembling flea bites, others bruises, others still, the blows from a whip, and were of different shades of color, from red to dark." Dr. Hall relates cases occurring in the epidemic of 1809; among them this: "A woman aged twenty-two years, was taken suddenly ill at church during morning service. She was so sleepy on the way home that her husband had much difficulty in preventing her from falling out of the carriage. At half past four in the afternoon she was comatose, had great prostration of strength, and so torpid in mind and body that she took no notice of any thing and could give no account of herself, only that her head pained her, and that she had great distress at her stomach. Her hands and feet were cold almost as ice. There was great irregularity of heat and cold on the surface of the body. The pulse was rather frequent, very weak, unequal and hesitating."

Dr. Thomas Minor, attempting in an able and discriminating paper, to identify the Middletown fever of 1823, with the Hartford spotted fever of 1809, says: "The peculiar and extreme deficiency of vital energy in the brain and nervous system, from the very access of the disease, without any appreciable reaction during the whole course; the early urgency of the symptoms; the constant liability to coldness of the extremities, and numbness of the skin; its degree of insusceptibility to the action of strong rubefacients

and blisters; the peculiar distressing and deathlike sinking in the epigastrium; the craving of hot liquids; the alternation of extreme torpor and excessive irritability of the stomach; the respiration resembling that of animals in which the Par Vagum has been divided; the immediate exhaustion produced by an erect position; the delirium resembling intoxication; the extreme variableness and irregularity of pulse, particularly its occasional deceptive fullness and force, when the patient is in the most alarming state of exhaustion; the very rapid progress of the disease; the impunity at least, with which the most extraordinary doses of opium were borne; the injurious effects of free evacuations, whether spontaneous or factitious; the general inefficacy of all medication to gain a hair's breadth upon the disease when from neglect or bad management the patient had once sunk down to a critical period, * * * ; the absence of febrile smell, and indeed any uncommon fetor of the excretions; all mark the identity of the disease with the Hartford spotted fever of 1809, and evince its diversity from common typhus or nervous fever." And again, "For eight or nine months it was difficult to find a case of acute disease that did not partake of the epidemic constitution, under whatever head it might be nosologically classed. Not more than two or three cases were this season attended with petecchiæ. In one of these, they were very dark and prominent. A marbled skin, efflorescence, and eruptions appeared in many instances."

These quotations from experienced observers, perhaps sufficiently describe the character of the spotted fever epidemics. In order now to bring into comparison with this form of disease the epidemic influence that has prevailed in this vicinity the past several months, the histories of two cases described as "anomalous"† may be introduced, and in the same connection the general bearing of the reports presented at our annual meeting a year ago, and also, as entitled to much consideration in the absence of written descriptions, the verbal testimony of almost every physician in this neighborhood.

March 17th of last year, at night, according to Dr. Crary, one Davis was complaining of headache and of feeling very chilly. On going to bed took composition powders. It was found in the morning that he had vomited freely, and had had a natural move-

† See Proceedings of Conn. Med. Society for 1862, page 212.

ment of the bowels. He looked purple about the face, especially under the eyes, and one leg presented the same appearance. Red spots were observed about the face, neck and breast. Dr. Jackson found him at 8½ o'clock the same morning, "extremely restless, tossing from side to side and exclaiming, 'I am dying, I am dying—can't you help me.'" He at first recognized him, but delirium soon interrupted consciousness.

"The tongue," Dr. Jackson continues, "had the appearance of the semicomatose state of Typhus; extremities were cool although not cold; pulse was imperceptible in the radial artery; and the eyes were extremely injected and prominent. The skin of the face, thorax, arms, hands, legs and feet was purple, shading in various parts into a deeper hue; upon the face and neck were spots from one to three lines in diameter, circular and somewhat resembling the ordinary blood blister. The tongue was covered with a dark coating, and the lips and teeth with sordes of the same hue."

At 3 o'clock of the same day, Dr. Crary relates, that Kazar, another patient in the same house returned from his work with chills, which continued until evening, when he took composition powders and went to bed. He vomited large quantities of very dark bilious matter during the night, and had a movement of the bowels. In the morning, "no pulse at the wrist; feet and hands nearly cold; tongue slightly furred and perfectly bloodless, looking very much as it does in the last stages of cholera. His face, hands and arms as far up as the elbows, and feet and legs to his knees, were covered with patches of extravasated blood of all shapes, and from the size of a five cent piece to that of a dollar, or larger. On the face there were a number resembling black and blue spots, one and two inches in length, looking as if caused by the blow of a whip. Petecchial spots were also scattered more or less over the surface of the body. He located all his pain in his head over the eyes, and complained of cold hands and feet. He died at 11 o'clock the same day."

These two cases are the only ones whose written description has come to notice. Other cases, similar in feature and course, came under the observation of intelligent physicians, but failed, much to the loss and regret of the profession, to be committed to

a permanent form. Hence allusion can be made to them only in this general way.

But your reports, already noticed, have this significant language: "There is an epidemic influence of marked character prevailing. It affects chiefly the mucous membranes, manifesting itself by diphtheritic exudations, or by vomiting and purging, and is attended by alarming prostration. In some of the severer cases the surface presents a dusky hue, or dark, or light red, or purple circumscribed spots. And complaint is made of pain in the limbs, back and head. The patient becomes early comatose and in fatal cases dies suddenly and usually early."

This language is but the epitome of voluminous testimony from medical men in various localities in the county. And more—this epidemic constitution, by the testimony of competent observers, has followed on in the course of other diseases and so impressed itself upon their features, as to rob them of their distinctive character, thus rendering their identification a matter of doubt and extreme solicitude.

The thoughtful physician throws into an ideal form, every recognized disease. He gives it form and feature; invests it with the elements of time and motion—that is, duration and progress; localizes it; clothes it with susceptibilities and capabilities, and names it.

The medical encyclopedist of 1809 and earlier, gathered up a few elements of disease that were playing wizard about him, noted their characteristics and labeled the collection "Spotted Fever," and passed it over to his successors for their doubtful recognition.

Less than a score of years after, the Connecticut river valley was again oppressed by a strange presence. Physicians hearing the stealthy approach and discerning the sable robes, hastened to catch the form and lineaments and give them expression. They labored faithfully and succeeded in producing a very tolerable portraiture. The ideal was fast taking shape.

For a few years past the physicians in this vicinity have been studying with great care and solicitude, the nature and tendencies of a fearful but subtle epidemic. Descriptions have been repeated, experiences compared, testimony accumulated, until quite a distinctive character and expression have been accepted. The ideal is still shaping.

And now the question arises again—Does the epidemic constitution now existing, materially differ from that which gave character to the diseases of 1809 and 1823? Was the spotted fever of those periods any other than our continued fever, as affected by this epidemic constitution?

It will readily be seen that no pretensions are made by these loose comparisons to a thorough investigation by any severe process of limitations. It is only attempted to catch a few misty gleams from distant beacon lights by which, perchance to descry what shores the laboring bark is nearing. For it is deemed better far, to hazard a few throws of presumptuous thought, than be hopelessly lost in the "deep slumber," as one has expressed it, "of a decided opinion."

Leaving the immediate consideration of this subject, the Mortuary record is at hand and claims attention. It is derived from the Tables prepared by Mr. Hoadley, the State Librarian.

There were last year in the county, 1732 deaths; 892 males, 821 females, 19 sex not stated. A further classification of these according to age, shows that in the first year of life, 166 males died, 132 females, 10 sex not stated; from the first to the fifth year, 167 males, 153 females, 2 sex not stated; from the fifth to the tenth, 49 males, 63 females; from the tenth to the twentieth, 61 males, 68 females; from the twentieth to the thirtieth, 81 males, 62 females, 1 sex not stated; from the thirtieth to the fortieth, 76 males, 77 females; from the fortieth to the fiftieth, 75 males, 63 females; from the fiftieth to the sixtieth, 57 males, 41 females; from the sixtieth to the seventieth, 61 males, 62 females; from the seventieth to the eightieth, 56 males, 68 females; from the eightieth to the ninetieth, 37 males, 38 females; from the ninetieth to the one hundredth, 1 male, 7 females; at one hundred, no males, 1 female. Of cases in which the age is not stated there were 5 males, 6 females. Cases where neither age nor sex are stated, 6.

In the class of Zymotics there were 536 deaths, against 373 occurring the preceding year; Uncertain Seat, 185, against 130, the preceding year; Nervous Organs, 239, against 183; Respiratory Organs, 333, against 347; Circulatory, 38, against 40; Digestive, 74, against 63; Urinary, 8, against 11; Generative, 18, against 21; Locomotive, 12, against 11; Integumentative, 3, against 4: From

old age, 51, against 56; violence, 75, against 72; unknown, 113, against 102; still born, 47, against 39.

The whole mortality was larger by 280 deaths, than in 1861, and larger by 200, than ever before recorded in any one year. About 100 of this excess occurred in Hartford alone.

The number of deaths in 1862 was double that of 1861, in Enfield, Hartland, Southington and Windsor Locks, and largely increased in East Windsor, Farmington, Glastenbury, Manchester, Marlborough, New Britain, South Windsor, Suffield and East Granby.

The deaths from Zymotics numbered 163 more than in 1861. Of these, 130 were returned from Scarlet Fever; while Diphtheria and Typhoid Fever returned about the same number. The returns from diseases of uncertain seat, give an excess of 55 over those of last year, and from the Nervous Organs, 56 more. The deaths from diseases of the Respiratory Organs, were 14 less. The returns for the remaining classes may remain unnoticed.

In the Sanitary Report of Hartford County for 1861, which was not published, a comparison was instituted between the Mortality Tables of Hartford and New Haven Counties. The period considered extended through 1859–60–61. The census of 1860 gives an appropriateness to these years readily appreciated.

Table exhibiting the Percentages of Deaths in Classes, to all deaths from known causes, and the Ratio of Deaths in Classes to the entire population in Hartford and New Haven Counties for the years 1859–60–61.

Classes.	Percentages.		Ratios, One death in a population of	
	Hartford Co.	New Haven Co.	Hartford Co.	New Haven Co.
Zymotics	27·94	26·21	239·048	230·493
Uncertain Seat ..	9·8	12·06	681·530	500·917
Nervous Organs .	14·11	13·59	473·484	443·148
Respiratory " ..	24·58	22·6	271·788	267·186
Circulatory " ..	2·7	2·62	2476·018	2299·409
Digestive " ..	5·02	4·07	1329·487	1482·411
Urinary " ..	·69	·66	9638·785	9126·093
Generative " ..	1·58	1·94	4216·968	3106·542
Locomotive " ..	·67	·46	9995·777	13274·318
Integumentative "	·17	·25	38555·142	24336·25
Old age	4·18	4·92	1596·958	1227·037
Violence	5·62	4·6	1188·925	1315·472
Still Born	2·94	6·02	2267·949	1003·556

The form of comparison is by percentages of deaths in classes, to deaths from known causes; also by ratio of deaths in classes to the entire population, as exhibited in the preceding table.

In Hartford County for the entire period of three years, there was one death from known causes to a population of 62·58. In New Haven County, one to a population of 57·29.

A casual inspection of the table of Percentages, would indicate a larger mortality in most of the classes of diseases in Hartford, than in New Haven County. But when it is remembered that the percentage arises from the relation of mortality by class to its own entire mortality, in each county, the deception disappears. The more obvious comparison is found in the table of Ratios. It there appears that the greater mortality in all classes, three only excepted, falls in New Haven County.

REPORT OF AN

ANOMALOUS SURGICAL CASE,

IN WHICH A NAIL BROKEN OFF IN THE FOOT SEPARATED INTO TWENTY-SIX SPLINTERS, WHICH WERE SUCCESSFULLY REMOVED AFTER INTENSE SUFFERING.

BY MOSES C. WHITE, M.D., OF NEW HAVEN.

May 11th, 1862, Mrs. A., of New Haven, about 45 years of age, stepping down from a height of about eighteen inches placed the left foot upon an "*eightpenny*" nail, which penetrated the sole of the shoe and passed entirely through the foot on the outside of the *os cuboides*. With great effort she extracted the nail, or a part of it, but felt a cracking as though a bone had been broken; at the same time the pain was so excruciating that it was with great difficulty she reached the house, some two rods distant. In the course of ten days she twice walked a distance of about a mile, and returned home, besides walking other short distances. I was called to see the patient in the latter part of June and found her suffering considerable pain, but there were no very obvious indications that any part of the nail had been left in the foot. As her father had died of tetanus and her constitution was delicate, she was treated with tonics, stimulants and anodynes, with the design of preventing an attack of that terrible disease which had removed her father. With the exception that the patient was confined to the house, nothing special occurred until the latter part of August, when a small piece of iron made its way to the surface an inch nearer to the heel than the spot where the nail had passed through the upper part of the foot. In September, another spot nearer the heel was so painful (a pricking sensation) that I lanced it, and after a few days, a sliver of iron one-third of an inch long appeared in the wound and was removed by the patient. In October, another

sliver one-fourth of an inch long was removed in a similar manner, after which the pain temporarily ceased and the patient walked a mile or more and home again, and supposed herself well. In a few days I was sent for again and found her suffering intense pain, which could only be relieved by the most powerful anodynes, as morphine, nux vomica and cannabis indica. From Nov. 14th to Jan. 19th, four more slivers of iron were removed by suppuration after suitable incisions over the points where the pain was most excruciating, between the *os calcis* and external malleolus. In the latter part of January the sufferings of the patient became intense and alarming. The appetite was very poor—patient emaciated, and sleep could be obtained only in short naps at infrequent intervals. For three months, the amount of sleep was never more than three or four hours in twenty-four, and often but one hour or none at all. Twice the patient became wild and delirious with pain, and often there were spasms of the muscles of the foot and leg. Altogether, her sufferings were the most excruciating I ever saw a person endure—the most powerful anodynes and even chloroform, which at times was inhaled at the rate of from one to two ounces in twenty-four hours, only moderated, without subduing, the spasms and intense agony which no language could describe.

During the three and a half months from Jan. 19th to May 8th, I lanced the foot eighteen or twenty times in a space extending from the insertion of the tendo Achillis to a point an inch and a half below the external malleolus, and sixteen more pieces of iron, varying in length from a quarter of an inch to an inch and a sixteenth, came out after the wounds had suppurated. Dr. J. Knight and Dr. L. J. Sanford were at different times called in consultation. At times it appeared as if human nature could not much longer withstand the terrible sufferings caused by these sharp, rough and ragged fragments of iron which clustered around the calcanean nerve and artery, both of which were wounded by the repeated incisions made to give exit to the offending bodies.

I will not occupy the time of the Convention by detailing the various expedients adopted to remove the causes of irritation and quiet the patient. Suffice it to say, that in all, twenty-two fragments of iron of various forms and sizes have been removed; the patient is now rapidly recovering, and is able to go up and down

stairs, and to visit near neighbors. The engraving shows the form and size of these slivers of iron. (The specimens of iron, enclosed in a neat case, were exhibited to the Convention.)

Two or three of the fragments were pulled out by the patient when they were found projecting into the wounds. The others were taken out by myself on dressing the wounds, where they had made their way during the night. In some cases, large holes were left in the flesh, so that a probe could be inserted where the the iron came out. Several times I was able to feel the iron with a probe, or the finger nail, after making an incision. A swollen and thickened appearance of the edges of the wound, and a profuse discharge of pus, preceded the exit of each of the larger slivers. From February to May, the patient entertained very little hope of recovery, and friends and physician sometimes shared all the apprehensions of the patient. The last piece, the one shown at the bottom right-hand corner of the engraving, came out the 8th of May. The patient is rapidly recovering, but there are some indications that another small fragment yet remains in the foot.† Twenty-one of the fragments shown in the cut (one small fragment was lost) weigh 32½ grains. An entire nail, such as the offender is supposed to have been, weighs 55 grains. May I never practice surgery long enough to meet with another so terrible a case, but if I do I shall regard it as a merciful dispensation of Providence if I am permitted to secure an equally favorable result.

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† Since this report was prepared, four more pieces of iron have been removed, about an inch below and forward from the external malleolus, viz: June 15th, a scale weighing 2 grains; June 21st, a piece ⅛ths of an inch long, weighing 9 grains, and June 22d, two small scales weighing together 1½ grains. These make the whole number removed, twenty-six pieces, weighing 45 grains. There may be some comminuted fragments still remaining, but no pieces of any considerable size. At this time (June 25th), the patient is able to walk about the house, and has every prospect of complete recovery.

BIOGRAPHICAL SKETCH OF THE LATE

LUTHER TICKNOR, M.D., OF SALISBURY.

BY J. G. BECKWITH, M.D., OF LITCHFIELD.

[*Read before the Litchfield County Medical Meeting, April 30, 1863.*]

To rescue from the oblivious past the memory of one who was personally known to most of us, and to perpetuate on our records the noblest traits of character in one of the former Presidents of the Connecticut Medical Society, is the object of this brief memoir.

Luther Ticknor was born in Jericho, Vt., March 9th, 1790. Deprived of his father by an accident at the age of fifteen, and his elder brother the late Benajah Ticknor, who became a distinguished surgeon in the United States Navy having left home, he determined to keep together the family which consisted of eight persons, six of whom were younger than himself; and by his own personal labor he performed this arduous task for three years. He then placed three of them at school and assisted in their support for two years longer.

At the age of twenty, he commenced the study of medicine in the office of Dr. James R. Dodge, in the town of Salisbury in this county, and by teaching school a part of the year, and laboring among the farmers a portion of the remainder, he supported himself and three members of his family. One of the brothers whom he thus supported was the late Caleb Ticknor, M.D., who distinguished himself as an author, and whose early death was a loss to science and to the medical profession.

Thus in early life he manifested a noble disinterestedness and regard for the welfare of others, and an energy and perseverance that surmounted obstacles which would have been regarded by ordinary men as insurmountable. He became distinguished for

generous hospitality to his friends, for benevolence to the poor, the suffering and the stranger, for the manly and generous impulses of his nature which recognized no moderate limit. For him, wealth and ambition out of his profession had no charms, nor could they prevent his entire consecration of himself to the self-sacrificing duties of the profession.

He had a high sense of honor, and he never abstained through deference to popular prejudice from the use of any article of the Materia Medica which belongs to the practice of the regular profession. He despised quackery in all its forms, and controlled in an unusual degree the popular opinion in favor of legitimate practice. He not only possessed the entire confidence of the community, but was popular with his professional brethren and did a large consulting business.

He took especial care of the reputation of his professional brethren, rebuking most signally any attempt on the part of the public to disparage their merits or underrate their claims to public confidence in the profession; but he hesitated not to reprove them when through timidity they hesitated about carrying out in desperate cases the prompt and energetic practice which was requisite to save the life of the patient. He once remarked to a practitioner of this class with whom he had been associated in counsel, "I cannot trust you; you have not moral courage enough for the practice of medicine; had you adopted the course of treatment we recommended yesterday the life of this patient might perhaps have been saved. The case is now hopeless; no human agency can arrest the disease."

Dr. Ticknor often alluded to the humble sphere from which he rose to a commanding eminence and great distinction in his profession. He took an honest and manly pride in recounting the obstacles he had surmounted by his indomitable perseverance: And the rugged path which he had traversed on his way to eminence and distinction gave him much sympathy for young men who were struggling in poverty to obtain an education.

He was a most successful teacher of medicine. He taught practically, giving the results of his large experience; he taught by the wayside as well as in his office. His remarks were original, pertinent, spicy and always interesting. His great natural powers

of mind grasped and mastered intricate and abstruse subjects without the advantages of education, even such as are obtained in a common school district; and so he became one of the most intelligent and successful practitioners by his own unaided efforts. He had strong common sense, sound judgment, a good memory and a well balanced and discriminating mind. He had a perfect command of language, which rendered him a most genial companion, a most social friend. No wonder that with moral and intellectual endowments superior to those of most men, and his noble disinterestedness and generosity, and a commanding presence and dignified and manly bearing, that he should have commanded the respect, admiration and confidence of the entire community. "One of nature's noblemen, a true-hearted, trustworthy, ingenuous man, who conferred not only honor on his profession, but on human nature itself." He was for many years a Fellow of the Medical Society of this State, and held the offices of Treasurer, vice-President, and at the time of his death, that of President. He was also for many years a member of the Standing Committee of Examination for Licenses and Degrees. He received the honorary degree of Doctor of Medicine from Berkshire Medical College in 1827, and from Yale, in 1829.

Dr. Ticknor took no active part in politics, but represented the town of Salisbury at two sessions of the legislature, where he was known as an active, influential and useful member; he spoke but seldom, but always with much power, and he held a high position among those who controlled the action of the legislature.

In the practice of his profession he was an observer of nature. He belonged to the Hypocratic school of practitioners. He never boasted of his cures; he did not arrogate any merit to himself; he was merely the servant of nature, watching the course of disease and aiding when necessary the waning powers and adapting his practice to the symptoms which presented themselves in the progress of disease, or anticipating them when the safety of his patient demanded it, with the energy which the case required.

It was not surprising that in the opinion of the public he possessed a wonderful skill and superior judgment; his countenance beamed with benevolence and great decision of character, indicating that he understood his patient's condition, and so he inspired

confidence and nurtured hope. As great benevolence was a distinguishing feature of his character he attended with the same readiness the poor and the rich, not considering whether he should receive compensation for his services or not. In 1829, the writer came into this State on a visit to the late Caleb Ticknor, whose home was with the subject of this memoir; he unexpectedly accepted an invitation to become an assistant to him in his extensive practice, and was with him about six months, when the writer removed to Litchfield. An inmate of his family, we witnessed his self-sacrificing devotion to his profession: Returning oftentimes from long tedious rides perhaps at midnight, worn out with fatigue and exhausted by fasting, he would ask on his arrival home whether there were any urgent calls for him to attend that night. His devoted wife would say, "Doctor, I am sorry to say that some person has sent for you"—perhaps from Mount Washington, six or eight miles distant, and only accessible on horseback. On being told, "they are probably not worse off than yourself; you are not able to go there to-night; you will receive no compensation nor thanks perhaps," his invariable reply would be, "they may be suffering, and while God pleases to continue these wretched beings in existence, it is my duty to render them all the assistance in my power." Perhaps no man in the State rendered more gratuitous service than Dr. Ticknor, nor had a larger practice.

Dr. Ticknor married Miss Eliza A. Lee, daughter of Elisha Lee, Esq., of Salisbury. His wife therefore belonged to a prominent and influential family in that ancient town. Two of Mrs. Ticknor's brothers were students of Dr. Ticknor, and have risen to eminence in the profession—Dr. Charles A. Lee, whose reputation as a lecturer and author of popular medical publications is high, and Dr. Moses A. Lee, my former partner in practice, who died at Pittsfield many years since while holding the professorship of Materia Medica in the Berkshire Medical Institution. Mrs. Ticknor, who is still living, contributed largely to her husband's social happiness and domestic enjoyment. Dr. T. had no children. He however became the father to several by adoption, and as an illustration of his benevolence and of the manner in which he received these objects of his especial care, I will relate a fact. A poor woman on her death bed expressed great concern for the fate of her little child,

who by her death would be left without any protection except that which the law provides for the destitute. In her honest simplicity she asked the Doctor if he would not take care of it. He replied that he would adopt it as his own; and placing a handkerchief on the child's head, and wrapping it in his overcoat he carried it home. It eat at his table and was educated by him, and he regarded it as his own child until death removed her from the bosom of his family.

Dr. Ticknor was intent upon professional progress. He read extensively the best works and periodicals of the day as they were published, and when he learned that a National Medical Association had been proposed, having for its object the promotion of professional interests, he advocated it earnestly in an able communication to the "Journal of Medicine," then edited by his friend and brother, Dr. C. A. Lee of New York. One of the last letters which I received from him, was one expressing sympathy and interest in the movement and asking my advice in reference to calling an extraordinary meeting of the Conn. Med. Society to appoint delegates to the first convention of the Association, which was held in New York in 1846. He issued the call, but before the time had arrived he was removed from earth.

We will give a comprehensive summing up of the character of our lamented friend taken from his published Obituary, which was written by one who knew him intimately, and was present during his last sickness as friend, physician and watcher; speaking of him he says:

"But although he was great as a physician he was something more. In him the friend and the physician were combined; his affection, good sense and sympathy, poured into the afflicted the oil of comfort—he soothed the pangs of woe, he mitigated distress, he found out something in the wise dispensations of Providence that he carried home to the bosom of affliction. Hence it was that he was looked upon as the guardian angel; his assiduity made him appear as the sufferer with the family; they viewed him as one of themselves—sympathy united him to them; he acquired new ties, new affections; he mourned with them, and his philosophy pointed out new sources of consolation; he was beloved, and he was everything which Heaven deputes to soften and dissipate human

misery. In short Dr. Ticknor had attained that highest style of man—he was a *Christian.*

We do not wish to overcharge the picture: It is true he was our friend and brother. But we describe him as we have known him for more than thirty years, and as he is known to the profession throughout Connecticut. There, on the field of his usefulness and fame and where he was best known, the truthfulness of our sketch will be felt and acknowledged. There, where he fell a martyr to his profession in the full career of his success and in the maturity of age and experience his memory will ever live in the hearts of those who love to contemplate true heroism, disinterested benevolence and humble usefulness.

The foundation of Dr. Ticknor's death was laid in the incessant fatigue and watching to which he was exposed during the last two months of his life. For forty days and nights he scarcely enjoyed an hour's rest undisturbed by calls, and but few times during that whole period were his clothes removed for the purpose of repose or sleep. Just one week previous to his death he was attacked with a violent chill, the precursor of a severe attack of bilious pneumonia of a highly congestive typhoid type, which ran its course unchecked by the means employed, and which terminated his valuable life on the evening of the 19th of April, 1846, in the 56th year of his age.

It was our melancholy lot to stand by the bedside of the deceased during the last two days of his life and witness the progress of a disease which had passed beyond the control of human art, and we shall not soon forget the perfect confidence, fortitude and resignation which he manifested in the midst of extreme suffering and distress, and the unflinching calmness with which, in the full possession of consciousness, he resigned his spirit into the hand of his Creator.

It was also our fortune to be present at his funeral, and there we witnessed a scene which will never pass from memory while memory lasts. The shops and stores of a thriving village all closed upon a week day as upon the sabbath; a congregation of people larger than was ever known to assemble in that place on any occasion, melted into tears! sobs bursting forth on every side. In short, one common feeling seemed to pervade—and that was one of deep, uncontrollable and absorbing grief.

Thus passed from earth a man whose character had as few blemishes in it as may be permitted to the natural weakness of humanity, if not as many excellencies as our natures are capable of attaining in this imperfect state of being. It is consoling to reflect that he has left an example worthy of imitation; a reputation unsullied by a single blot; a name which will never be mentioned but with tears of gratitude and affection by thousands now living, a rich legacy which will be treasured up by friends and handed down as an heir loom to posterity."

It seems proper that the memorial of such a bright and distinguished example of professional excellence and virtue should have a place in the proceedings of this Society, which held a place in his affections above all other societies on earth, and subordinate only to the Church of the Living God.

BIOGRAPHICAL SKETCH OF THE LATE

JEHIEL WILLIAMS, M.D., OF NEW MILFORD.†

BY J. G. BECKWITH, M.D., OF LITCHFIELD.

[*Read before the Litchfield County Medical Meeting, April* 30, 1863.]

When the aged patriarch of our profession, distinguished for superior excellence, "throws off this mortal coil" to enter upon the rewards of enduring faithfulness which await him hereafter, it seems proper that some suitable memorial should be placed upon our records to commemorate his virtues and his moral and professional worth. Such was Jehiel Williams, M.D., who was regarded by all of his cotemporaries in the profession as more than an ordinary man, whom

> "None knew but to love,
> Nor named but to praise."

Dr. Williams was born in Lebanon, Conn., Oct. 4, 1781. He received his education in the schools of his native town and prepared for college at the Academy in Colchester, though his restricted means prevented his entering. He commenced the study of Medicine in the office of the late Dr. (Gov.) Peters at Hebron, and in 1807 and 1808, attended two courses of Medical Lectures in the University of New York, where he was a private student in the office of the late Dr. Edward Miller, Professor of Theory and Practice in the institution. The succeeding year he spent in attendance upon hospital practice under the late Dr. Hosack who was then in the zenith of his professional eminence and was one of the surgeons in that venerable institution, the New York Hospital. He was licensed to practice medicine and surgery, Oct. 5, 1807, by the Connecticut Medical Society, and subsequently re-

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† We would acknowledge our obligations to Capt. G. S. Williams, 19th Regt. C. V., for the facts and materials of this sketch of the life of his father

ceived by their recommendation, from Yale College, the honorary degree of Doctor of Medicine.

Dr. Williams, after leaving the New York Hospital in 1809, took up his residence in the town of New Milford, Litchfield County, and continued to practice there until he was compelled by reason of ill health and bodily infirmity, in the month of January, 1862, to relinquish the duties of his profession. He died on the 9th of June, 1862, aged 80 years, 8 months and 4 days.

Dr. Williams was regarded by all who knew him as a consistent man. In all the relations of life he was kind, social and agreeable; no perplexities nor trials disturbed the equanimity of his temper, nor prevented him from the performance of any good work, whether of a public or private nature.

As a man, his integrity was unimpeachable, as well as the purity of his motives. So great was the amiability of his disposition, so agreeable and irreproachable was his intercourse with his fellow men and so delicate his regard for the feelings and rights of others, that he commanded the confidence and esteem of all.

He was a reliable citizen and received evidence of the respect and confidence of his fellow citizens in the many positions of trust and responsibility with which he was honored by their unsolicited suffrages—for he *sought* nothing out of the sphere of his profession.

He was a distinguished member of the Constitutional Convention which amended the Constitution of this State in 1818, and represented with much ability his town in the legislature of 1831, 1840 and 1851; he also declined many offices of trust which were tendered him.

Dr. Williams regarded his obligations to the General and State Governments as sacred and next to his religious duties, and so he always performed the duty of an elector at the polls unless prevented by imperative duties to his patients, whom he never neglected. Ambition, ease, or any other allurement, could not divert him from the faithful performance of professional duties. His labors were in season and out of season, and were in no instance withheld from a fear that they would not be remunerated or appreciated. He regarded the profession which he loved, as the noblest employment in which he could be engaged, and so no sacri-

fices were too great for him to make, that he might faithfully discharge its duties and extend its benefits to every form of suffering humanity.

Dr. Williams combined the qualities of a good practitioner. He was well acquainted with the animal frame and with the diseases in their varying phases, to which it is subject; these he readily apprehended and appreciated, possessing, as he did, a sound and discriminating mind and being a close observer of nature. His practice was simple and safe. He had great confidence in the *vis medicatrix naturæ* and reserved extreme medicines for desperate cases. He did a large consultation practice, and his professional brethren the more cheerfully patronized him because he was so honorable, courteous and kind in all relations with them. He always traveled on horseback until near the close of life when infirmities made it necessary for him to go in a carriage. For more than half a century, by day and by night, in all weather and seasons, and when his route was by the most unfrequented and unbroken roads he responded to the summons of his patients with the same willingness and alacrity—All shared in his sympathies and services for he was the common friend of all.

No wonder that when he died a dark cloud shrouded the field of his labors; all mourned the loss of one who had been their own and their fathers' friend. The painful reflection that he could come to their call no more, caused despondency and gloom. They had almost hoped that he who had so long defended them from the assaults of disease and to whom they had confided their dearest earthly hopes, would have lived forever and been their safeguard and defense.

Dr. Williams was a sincere, earnest and devoted Christian. For more than fifty years he was a communicant of the Protestant Episcopal Church and was, most of the time, one of its officers; his labors, liberal contributions and wise counsels, were invaluable to her growth and prosperity.

He manifested throughout a long and painful illness the sincerity of his faith. During the tedious hours of his protracted sufferings not a murmur escaped his lips and when they were alluded to, he remarked that "his sufferings were nothing compared with what his Savior endured for him." He united with a grateful heart in

the administration of the holy communion a few days before his departure.

He was familiar with the Scriptures, often repeating passages applicable to his situation. As his departure was drawing near he requested the reading of the twenty-third Psalm, which was a great favorite with him. On being asked if any cloud obscured his faith, he replied that all was clear and that "no language could express the glories of his vision of the future." Addressing those around him he said, "in the light of the everlasting Gospel may we all meet again." Memorable words; thus he lived and thus he died; peaceful and glorious was his departure. It was a fitting close of a well spent life.

Dr. Williams has left among his papers a memorandum of the symptoms of the disease known as Typhoid Pneumonia or Spotted Fever, termed also from its place of origin, "the New Milford Fever," which we here append believing that it will possess interest to the profession.

He writes, "I was called on the 23d of January, 1812, to visit the first two cases known as the New Milford Fever. The weather of the autumn of 1811 had been unusually mild, and during the month of December for about six days it was mild, and then for about the same length of time, very cold. On the 24th of December there occurred one of the most severe snow storms experienced for many years; people in different parts of the town froze their ears and noses in taking care of their cattle and sheep. Fowls, sheep and cattle perished in large numbers. The weather from December to May was changeable, and there were three ice floods in the Housatonic river quite near the village during the winter.

As the weather changed from mild to cold, the disease became more fatal, and in the month of March, twenty-seven persons died in a circuit of two miles. The most severe cold weather commenced Dec. 24, 1811.

There were cases of this disease in Roxbury and Washington—neighboring towns in Litchfield county, and also in the towns of Amenia and Stamford, Dutchess county, N. Y. In 1813, there were a few cases in New Milford and the towns near, and the disease likewise prevailed in certain localities in New York, Massachu-

setts and Vermont, not however in as malignant a form as in New Milford in 1812.

The disease attacked persons between the ages of 25 and 60; the most fatal cases were over 35 years of age. There were only three or four cases among children. The intemperate were very sure to die, while the temperate recovered from more severe symptoms than destroyed the intemperate.

The two first cases were visited first on the 23d of January, 1812, and again on the 24th; on this day, two new cases occurred—and on the evening of the 25th, the four were dead. Most of the cases of 1812, ran 24, 36 and 48 hours before they proved fatal.

The first symptom of the disease was a severe chill similar to that of intermittent fever, and in severe cases the persons did not have reaction but died in the cold fit. In other cases there was reaction with fever, stinging heat, a livid appearance of the cheeks and bloated face. Some, in the cold stage, had pain in the head with giddiness; a feeling of weakness pervading the whole body, and much difficulty of breathing—as if a weight was on the chest; they had some cough, with expectoration which varied in appearance. In the more severe cases the matter was like dark soap, and in a few cases there was a froth in the mouth like cotton wool; these soon died. When the expectoration became copious and was streaked with fresh blood the cases usually recovered, but when the tongue had a slimy appearance like dark putrid meat, they soon proved fatal. The urine was scanty and high colored, and the pulse, which was frequent increased in frequency with the disease and became soft and infrequent with the abatement of the symptoms. The discharges from the bowels were of a bilious character and became more dark as the disease advanced. In some cases there was vomiting, or an attempt to vomit. After 24 or 36 hours the patient would become easy, appear to sleep, and in a moment the skin would become moist; but no improvement resulted unless the expectoration was streaked with fresh blood. The patients would desire cold water, which invariably increased their distress."

Such were the symptoms of this most malignant disease as written out by Dr. Williams. The paper on its treatment is not to be found, which is much to be regretted.

PROCEEDINGS.

THE Officers and Fellows of the Connecticut Medical Society met in Convention at the Medical College in the city of New Haven, May 22d and 23d, 1861.

The Convention was called to order by Ashbel Woodward, M. D., President, at 11 o'clock, A. M.

Drs. Hunt and Downing were appointed a Committee on Credentials.

Dr. Hunt, Chairman, reported the following list of Fellows for the present year, viz.:

FELLOWS.

HARTFORD COUNTY.

Henry Holmes, M. D.
E. K. Hunt, "
L. S. Wilcox, "
A. S. Warner, M. D.
Wm. Scott, "

NEW LONDON COUNTY.

*Mason Manning, M. D.
E. B. Downing, "
Isaac G. Porter, "
*A. W. Coats, M. D.
L. S. Paddock, "

FAIRFIELD COUNTY.

Elijah Gregory, M. D.
*R. C. McEwin, "
D. H. Nash, "
*Geo. Blackman, M. D.
George Dyer, "

MIDDLESEX COUNTY.

Rufus Baker, M. D.
Horace Burr, "
S. W. Turner, M. D.

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* Absent.

NEW HAVEN COUNTY.

Isaac Goodsell, M. D.
Asa J. Driggs, "
L. N. Beardsley, "
D. A. Tyler, M. D.
P. A. Jewett, "

WINDHAM COUNTY.

Harvey Campbell, M. D.
John H. Simmons, "
Milton Bradford, "
*John McGregor, M. D.
Jas. B. Whitcomb, "

LITCHFIELD COUNTY.

Samuel T. Salisbury, M. D.
Charles H. Webb, "
*H. M. Knight, "
*H. W. Shove, M. D.
G. B. Miller, "

TOLLAND COUNTY.

F. L. Dickinson, M. D..
*S. F. Pomeroy, "
G. H. Preston, M. D.

The President then read his Annual Address. .

On motion, by Dr. Jewett,

Voted, That Prof. H. Bronson be requested to read the Biographical Sketch of Wm. Tully, M. D., prepared by him, during the Afternoon Session.

Drs. J. G. Adams, H. D. Bulkley, and J. Linsley, were introduced as Delegates from the N. Y. Academy of Medicine, and Drs. Hiram Corliss and C. S. Wood, as Delegates from the New York State Society.

On motion by Dr. Catlin,

Voted, That the gentlemen above named be received as guests of the Society, and that the Secretary be directed to provide for their accommodation at the New Haven Hotel.

Dr. Jewett, on behalf of the New Haven City Medical Association, invited the Convention to a collation at the Tontine, at 8 o'clock, P. M. Accepted.

Dr. Dickinson moved a vote of thanks to the President for his able and interesting Address.

The election of Officers being next in order, Drs. Paddock and Turner were appointed Tellers.

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* Absent.

The following gentlemen were duly elected, viz.:

J. G. BECKWITH, M. D., PRESIDENT.
E. K. HUNT, M. D., VICE-PRESIDENT.
GEORGE O. SUMNER, M. D., TREASURER.
P. M. HASTINGS, M. D., SECRETARY.

Adjourned to 2½ o'clock, P. M.

Afternoon Session.

Dr. Jewett moved a suspension of the rules, and that the President appoint one Fellow from each County to nominate candidates to fill the vacancies in the Standing Committees. Adopted.

The following gentlemen were appointed a Nominating Committee, viz.:

Hartford County, Henry Holmes; New Haven County, Isaac Goodsell; New London County, I. G. Porter; Windham County, Harvey Campbell; Fairfield County, Elijah Gregory; Litchfield County, Samuel T. Salisbury; Middlesex County, Rufus Baker; Tolland County, F. L. Dickinson.

The Committee were directed to report to-morrow morning.

By special order of the Convention, Prof. Bronson then read a Biographical Sketch of the late William Tully, M. D.

A vote of thanks was presented Dr. Bronson for his able paper and a copy requested for publication with the proceedings of the Convention.

The President appointed the following Committees, viz.:

On Unfinished Business of the last year:

Drs. Dyer, Wilcox, Paddock, Burr, Driggs, Simmons and Webb.

On Candidates for Gratuitous Course of Lectures:

Drs. Beardsley, Salisbury and Paddock.

On Honorary Degrees and Honorary Membership:

Drs. Jewett, Salisbury and Downing.

To nominate Dissertator and Alternate:

Drs. Porter, Tyler and Salisbury.

On Debentures:

Drs. Whitcomb, Miller and Preston.

On motion, by Dr. Jewett, it was

Voted, That the Delegates appointed to the American Medical Association by the Convention last year, be continued to the next year.

The Annual Dissertation was read by John B. Lewis, M. D., of Rockville.

Dr. Porter moved a vote of thanks to Dr. Lewis for his able and philosophical Dissertation, and that the Secretary be directed to request a copy for publication with the proceedings.

Dr. Beardsley, Chairman, recommended the following gentlemen for a Gratuitous Course of Lectures, viz.:

Frank B. Tuttle from New Haven County.
Samuel Lynch from New London County.
Thomas Hills from Tolland County.
Frederick A. Dudley from the State at large.

Report adopted.

Dr. Rockwell, Chairman, read the report of Committee on Publication. [See Appendix A.] The Committee offered the following resolutions, which were unanimously adopted, viz.:

Resolved, That the Secretary of the State Medical Society be requested hereafter to so compile the material designed for publication by the Society, that each year's pamphlet shall constitute one number of a volume; the volume to be made up of four such numbers; the paging to commence with the year 1860; that a table of Contents be placed upon the first page of each number, and that an index be added to the fourth number.

Resolved, That the officers and members of the several County organizations are earnestly requested to use all reasonable exertions to procure material in the form of dissertations and voluntary communications, for publication in the Proceedings.

Dr. Porter, Chairman, nominated L. S. Paddock, M. D., of Norwich, for Dissertator, and M. C. White, M. D., of New Haven, for Alternate. On motion, the nomination was confirmed by the Convention.

Dr. Jewett, Chairman, reported the names of J. G. Adams, M. D., and Jared Linsley, M. D., of New York, for Honorary Membership.

On ballot, Ebenezer Alden, M. D., of Randolph, Mass., and B. Fordyce Barker, M. D., of N. Y. City, were elected Honorary Members of this Society.

No report of Committee on Examination had been prepared.

Dr. C. L. Ives, Chairman of the Committee on reorganization of the Society upon a more voluntary basis, appointed at the last Convention, read a report, [vide Appendix B.] The following resolutions offered by the Committee were unanimously adopted.

1st. *Resolved*, That so much of the by-laws of this Society, as relates to debenture bills, be hereby repealed.

2d. *Resolved*, That in future Conventions, the business and literary meetings be held distinct; that a Committee of five be appointed at each Convention, three of whom shall be resident at or in the vicinity of the town where the Convention shall next be held, whose duty it shall be to make arrangements for the literary meeting; to solicit medical papers for the meeting; to examine the same and adjudge such prizes as the Society may offer; and to provide for a dinner, the expense of which shall be defrayed from the funds of the Society, and the Chairman be chosen by the preceding Convention.

3d. *Resolved*, That the by-laws exempting members over sixty years of age and the County Clerks, from taxation, be hereby repealed.

4th. *Resolved*, That such Medical publications as the Society's finances warrant, be distributed under direction of the Committee of Publication, to those members whose taxes are not in arrears.

5th. *Resolved*, That in future, the Conventions be held in the several Counties.

Dr. Dickinson moved that the Committee of Publication be referred to the Committee on Nominations. Adopted.

The Treasurer read his report.

Committee to audit Treasurer's account, Drs. Dickinson, Turner and Warner.

Adjourned to 8 o'clock A. M., to-morrow.

Thursday, May 23d, 1861.

Dr. Jewett moved that the Committee on Nominations be directed to report the names of five gentlemen to act as Committee of Arrangements for the next Convention. Adopted.

Bridgeport was selected as the place of the next Convention.

Dr. Dickinson, Chairman, reported that the Committee had examined the Treasurer's report and found it correct. Report accepted.

Dr. Sumner, Treasurer, presented the following General Summary:

Cash in Treasury, - - - -		$59.17
Due from Clerks, - - -	$1,086.93	
Deduct one half for commissions, bad debts, abatements, &c., - - -	543.46½	
Leaves - - - - - -		543.46½
Total of Cash and Due, - - -		$602.63½
The Society owes for outstanding debentures, -		500.00
Leaves balance of - - -		$102.63½

Dr. Whitcombe, Chairman, reported a Debenture bill, which was approved and ordered paid.

Dr. Hunt offered the following resolution which was unanimously adopted, viz.:

Whereas, The address on "Life," delivered yesterday, by our late President, Dr. Woodward, contains much valuable practical information, which in the opinion of this Convention, will be received and read by all intelligent persons, both with pleasure and advantage: therefore,

Resolved, That 750 extra copies of this address be printed in pamphlet form, and circulated by our Secretary, especially among the Clergy of the State and those engaged in the immediate management of our Schools and educational Institutions of every class.

Dr. Jewett moved that the Secretary be directed, as far as practicable, to distribute the proceedings and publications of the Society, through members of Legislature; and that the Treasurer be directed to pay all necessary expenses incurred by the County Clerks in such distribution. Carried.

In compliance with the request of the Governor, that the "Connecticut Medical Society should designate a small number of the profession" who should act as an advisory Board in future appointments of Surgeons and Assistant Surgeons to the Connecticut Volunteers,

Dr. Hunt offered the following preamble and resolution, viz.:

Whereas, The fact of an impending war exists, which may be both prolonged and calamitous; and *whereas*, this Convention regard the health, comfort and well-being of the force of this State, to depend very largely upon the qualifications of its Medical Staff; and *whereas*, none can so well ascertain, from the very nature of

the case, the qualifications of those who apply for the position of Surgeons or Assistant Surgeons, as their compeers, the Physicians and Surgeons of the State represented in this Convention: therefore be it

Resolved, That it is expedient to appoint a Board of Medical men, who shall, whenever desired by the Governor, the Commander-in-Chief of the forces raised or to be raised in this State, assist that functionary, by all suitable means, in making said appointments; so that none but the best and most competent will be able to secure the offices in question.

Resolved, That this Committee consist of eight gentlemen, one from each County, and be selected by the Fellows. Adopted.

The following gentlemen were selected by the Fellows of the several counties to constitute such Committee, and confirmed by vote of the Convention, viz.:

Hartford County,	Gurdon W. Russell,	M. D.
New Haven "	Pliny A. Jewett,	"
New London "	Ashbel Woodward,	"
Windham "	Lewis Williams,	"
Fairfield "	Robert Hubbard,	"
Litchfield "	Josiah G. Beckwith,	"
Middlesex "	Rufus Baker,	"
Tolland "	S. G. Risley,	"

On motion, the action of the New Haven County Meeting in the case of William C. Williams, of Cheshire, was confirmed. The said Williams being hereby expelled from the Society.

Dr. Woodward moved that a tax of two dollars be laid upon all members of the State Society, payable on the 1st day of June, 1861. Passed.

The Committee on Nominations reported the following list of names to fill the Standing Committees, viz.:

Horace Burr, M. D.,
Milton Bradford, " } Committee on Examination.

Henry W. Buell, M. D.,
Gilbert H. Preston, " } Committee to nominate Physician to Retreat.

Robert A. Manwarring, M. D.,
H. M. Knight, " } Com. to nominate Professors in Med. Institut'n of Yale College.

Henry W. Buell, M. D.,
Henry Bronson, " } Committee of Publication.

D. H. Nash, M. D.,		Committee of Arrangements.
R. Hubbard,	"	
E. Gregory,	"	
S. W. Turnèr,	"	
C. L. Ives,	"	

On ballot, the above were elected.

The following delegates were appointed to attend the next Annual Meeting of the New York State Medical Society, viz.:

Hartford	County,	P. M. Hastings,	M. D.
New Haven	"	Isaac Goodell,	"
New London	"	A. B. Haile,	"
Windham	"	Joseph Palmer,	"
Fairfield	"	Robert Hubbard,	"
Litchfield	"	R. Deming,	"
Middlesex	"	Charles Woodward,	"
Tolland	"	Chas. F. Sumner,	"

On motion of Dr. Woodward, a vote of thanks was tendered the New Haven City Medical Association, for the refined and generous hospitality extended to the members of the Convention.

Dr. Jewett nominated William B. Nash, to be the presiding officer at the annual dinner of the next Convention. Passed.

On motion,

Voted, That one thousand copies of the Proceedings be published for the use of the members of the Society.

Adjourned.

P. M. HASTINGS, M. D., *Secretary*.

Officers of the Society,

For 1861-62.

PRESIDENT.
JOSIAH G. BECKWITH, M. D., OF LITCHFIELD.

VICE-PRESIDENT.
E. K. HUNT, M. D., OF HARTFORD.

TREASURER.
GEORGE O. SUMNER, M. D. OF NEW HAVEN.

SECRETARY.
PANET M. HASTINGS, M. D., OF HARTFORD.

Standing Committees.

Committee on Examination.
JOSIAH G. BECKWITH, M. D., *ex officio.*
SAMUEL B. BERESFORD, M. D.
JOEL CANFIELD, M. D.
WILLIAM WOODRUFF, M. D.
HORACE BURR, M. D.
MILTON BRADFORD, M. D.

Committee to nominate Physician to Retreat for the Insane.
LEWIS WILLIAMS, M. D.
A. B. HAILE, M. D.
ROBERT HUBBARD, M. D.
HENRY W. BUELL, M. D.
GILBERT H. PRESTON, M. D.

Committee to nominate Professors in the Medical Institution of Yale College.

BENJAMIN H. CATLIN, M. D.
WILLIAM H. RICHARDSON, M. D.
D. H. HUBBARD, M. D.
ROBERT A. MANWARRING, M. D.
H. M. KNIGHT, M. D.

Committee of Publication.

JOHN B. LEWIS, M. D.
P. M. HASTINGS, M. D.
ROBERT HUBBARD, M. D.
HENRY W. BUELL, M. D.
HENRY BRONSON, M. D.

Committee on Registration.

BENJAMIN H. CATLIN, M. D.
E. K. HUNT, M. D.
PLINY A. JEWETT, M. D.

MEMBERS OF THE SOCIETY.

HONORARY MEMBERS.

*FELIX PASCALIS, - - -	New York.
*JAMES JACKSON, - - -	Boston, Mass.
*JOHN C. WARREN, - - -	Boston, Mass.
*SAMUEL L. MITCHELL, -	New York.
*DAVID HOSACK, - - - -	New York.
*WRIGHT POST, - - -	New York.
BENJAMIN SILLIMAN, - -	New Haven.
*GEORGE M'CLELLAN, - -	Philadelphia, Pa.
*JOHN MACKIE, - - - -	Providence, R. I.
*CHARLES ELDREDGE, - -	East Greenwich, R. I.
*THEODORE ROMEYN BECK, -	Albany, N. Y.
*JAMES THATCHER, - -	Plymouth, Mass.
EDWARD DELAFIELD, - -	New York.
JOHN DELAMATHER, - -	Cleveland, Ohio.
*WILLIAM P. DEWEES, - -	Philadelphia, Pa.
*JOSEPH WHITE, - - -	Cherry Valley, N. Y.
JACOB BIGELOW, - - - -	Boston, Mass.
WALTER CHANNING, - -	Boston, Mass.
*PHILIP SING PHYSIC, - -	Philadelphia, Pa.
*LEWIS HEERMAN, - - -	U. S. Navy.
*DANIEL DRAKE, - - - -	Cincinnati, Ohio.
HENRY MITCHELL, - - -	Norwich, N. Y.
NATHAN RYNO SMITH, - -	Baltimore, Md.
VALENTINE MOTT, - - -	New York.
*SAMUEL WHITE, - - -	Hudson, N. Y.
REUBEN D. MUSSEY, - -	Cincinnati, Ohio.
*WILLIAM TULLY, - - -	Springfield, Mass.
RICHMOND BROWNELL, - -	Providence, R. I.
*WILLIAM BEAUMONT, - -	St. Louis, Mo.

*Deceased.

SAMUEL HENRY DICKSON, -	Charleston, S. C.
*SAMUEL B. WOODWARD, -	Northampton, Mass.
*JOHN STEARNS, - - - -	New York.
STEVEN W. WILLIAMS, - -	Deerfield, Mass.
*HENRY GREEN, - - - -	Albany, N. Y.
*GEORGE FROST, - - -	Springfield, Mass.
WILLARD PARKER, - - -	New York.
BENAJAH TICKNOR, - -	U. S. Navy.
ALDEN MARCH, - - - -	Albany, N. Y.
*AMOS TWITCHELL, - - -	Keene, N. H.
CHARLES A. LEE, - - -	New York.
DAVID S. C. H. SMITH, - -	Providence, R. I.
*JAMES M. SMITH, - - -	Springfield, Mass.
HENRY D. BULKLEY, - -	New York.
J. MARION SYMS, - - - -	New York City.
JOHN WATSON, - - - -	New York City.
FRANK H. HAMILTON, - -	Buffalo, N. Y.
ROBERT WATTS, - - -	New York.
J. V. C. SMITH, - - - -	Boston, Mass.
O. WENDELL HOLMES, - -	Boston, Mass.
JOSEPH SARGENT, - - -	Worcester, Mass.
MASON F. COGSWELL, - -	Albany, N. Y.
FOSTER HOOPER, - - -	Fall River, Mass.
THOMAS C. BRINSMADE, -	Troy, N. Y.
GEORGE CHANDLER, - - -	Worcester, Mass.
GILMAN KIMBALL, - - -	Lowell, Mass.
JAMES McNAUGHTON, - -	Albany, N. Y.
USHER PARSONS, - - -	Providence, R. I.
S. D. WILLARD, - - - -	Albany, N. Y.
JOHN WARE, - - - - -	Boston, Mass.
EBENEZER ALDEN, - - -	Randolph, Mass.
B. FORDYCE BARKER, - -	New York City.

Gentlemen proposed for Honorary Membership.

J. G. ADAMS, M. D. - - -	New York City.
JARED LINSLEY, M. D. - -	New York City.

ORDINARY MEMBERS.

The names of those who have been Presidents are in capitals.

HARTFORD COUNTY.

J. D. WILCOX, M. D., Chairman.

GEORGE CLARY, M. D., Clerk.

HARTFORD, Henry Holmes, S. B. Beresford, G. B. Hawley, G. W. Russell, David Crary, P. W. Ellsworth, E. K. Hunt, J. S. Butler, J. C. Jackson, A. W. Barrows, Thomas Miner, H. Gridley, William Porter, John F. Wells, William R. Brownell, P. M. Hastings, Edward Brinley, Stephen H. Fuller, George Clary, W. H. Tremaine, Lucian S. Wilcox, Stephen E. Fuller, Henry S. Stearns.
BERLIN, E. Brandagee.
BLOOMFIELD, Henry Gray.
BRISTOL, Roswell Hawley.
BURLINGTON, William Elton, 2d.
Canton, Collinsville, R. H. Tiffany.
EAST HARTFORD, S. L. Child, H. K. Olmsted.
Broad Brook, Marcus L. Fisk.
Warehouse Point, Joseph Olmsted.
ENFIELD, J. P. Converse, A. L. Spalding.
Thompsonville, L. S. Pease.
FARMINGTON, Asahel Thompson.
Plainville, G. A. Moody.
GLASTENBURY, H. Clinton Bunce.
South Glastenbury, C. E. Hammond.
Eastbury, Sabin Stocking.
East Granby, Chester Hamlin.
West Granby, Justus D. Wilcox.
North Granby, Francis F. Allen.
MANCHESTER, Wm. Scott.
NEW BRITAIN, Samuel Hart, E. D. Babcock, B. N. Comings, S. W. Hart.
ROCKY HILL, R. W. Griswold.
SIMSBURY, R. A. White.
Tariffville, G. W. Sandford.
SOUTHINGTON, Julius S. Barnes, N. H. Byington, F. A. Hart.
SOUTH WINDSOR, H. C. Gillette, H. Goodrich.
East Windsor Hill, Sidney Rockwell, William Wood.
SUFFIELD, Aretus Rising, M. S. Newton.
West Suffield, O. W. Kellogg.
WETHERSFIELD, E. F. Cook, A. S. Warner, R. Fox.
WEST HARTFORD, Edward Brace.
WINDSOR, A. Morrison, S. A. Wilson.
WINDSOR LOCKS, Samuel W. Skinner.
AVON, Frank Wheeler.
SOUTH MANCHESTER, A. J. Webster.

NEW HAVEN COUNTY.

CHARLES HOOKER, M. D., Chairman.

LEONARD J. SANFORD, M. D., Clerk,.

NEW HAVEN, Eli Ives, Jonathan Knight, Samuel Punderson, A. S. Monson, Charles Hooker, Nathan B. Ives, E. H. Bishop, Levi Ives, P. A. Jewett, David L. Daggett, George O. Sumner, David A. Tyler, Henry Bronson, E. A. Park, S. G. Hubbard, W. J. Whiting, H. W. E. Matthews, C. A. Lindsley, Worthington Hooker, T. H. Totten, John Nicoll, Caleb H. Austin, Moses C. White, L. J. Sanford, Chas. L. Ives, Edward Bulkley, Jr., S. C. Gourdin, Wm. B. De Forest, Frederick Dibble, T Beers Townsend, Horace P. Porter, George A. Ward, Aaron S. Oberly.
Fair Haven, Charles S. Thompson, Wm. M. White.
Westville, Samuel Lloyd.
ORANGE, Henry W. Painter.
BETHANY, Asa C. Woodward.
BRANFORD, H. V. C. Holcombe.
North Branford, Sheldon Beardsley.
CHESHIRE, A. J. Driggs, Edward Woodward.
DERBY, Charles H. Pinney.
Birmingham, Ambrose Beardsley.
Humphreysville, Thomas Stoddard, S. C. Johnson, Joshua Kendall.
GUILFORD, Joel Canfield, Alvan Talcott.
HAMDEN, Edwin D. Swift.
MADISON, D. M. Webb.
WEST MERIDEN, B. H. CATLIN, E. W. Hatch, Asa H. Churchill.
MILFORD, Hull Allen, L. N. Beardsley, Thomas Dutton.
NAUGATUCK, J. D. Mears, John W. Lawton.
North Haven, R. F. Stillman.
OXFORD, Lewis Barnes.
SOUTHBURY, A. B. Burritt.
South Britain, N. C. Baldwin.
WALLINGFORD, Nehemiah Banks.
WATERBURY, M. C. Leavenworth, G. L. Platt, John Deacon, G. E. Perkins, Philo G. Rockwell, Thomas Dougherty.
WOODBRIDGE, Isaac Goodsell, Andrew Castle.

NEW LONDON COUNTY.

MASON MANNING, M. D., Chairman.

L. S. PADDOCK, M. D., Clerk.

NEW LONDON, Dyer T. Brainard, Nathaniel S. Perkins, Isaac G. Porter, William W. Miner, D. P. Francis, Albert Hobron, Robert A. Manwarring, Robert McCurdy Lord, A. T. Douglas.
NORWICH, Richard P. Tracy, Erastus Osgood, Elijah Dyer, Elisha Phinney, A. B. Haile, Edwin Bentley, Daniel F. Gulliver, Lewis S. Paddock, D. W. C Lathrop.
BOZRAH, Samuel Johnson.
COLCHESTER, Ezekiel W. Parsons, Fred'k Morgan, Melancthon Storrs.
EAST LYME, John L. Smith.
FRANKLIN, ASHBEL WOODWARD.
GROTON, Joseph Durfey.
LEBANON, Joseph Comstock, Ralph E. Green.
LYME, Richard Noyes.
MONTVILLE, John C. Bolles.
Uncasville, Samuel E. Maynard.
PRESTON, Eleazer B. Downing.
STONINGTON, William Hyde, George E. Palmer, William Hyde, Jr.
Mystic, Mason Manning, N. M. Trabon.
Mystic Bridge, E. F. Coates.
Mystic River, A. W. Coates.
Noank, Orrin E. Miner.

FAIRFIELD COUNTY.

E. P. BENNETT, M. D., Chairman.

D. S. BURR, M. D., Clerk.

FAIRFIELD, S. P. V. R. Ten Broeck.
Greenfield, RUFUS BLAKEMAN.
Southport, Justus Sherwood.
BRIDGEPORT, D. H. Nash, F. J. Judson, H. L. W. Burritt, Wm. B. Nash, Robert Hubbard, H. N. Bennett, Elijah Gregory.
BROOKFIELD, A. L. Williams.
DANBURY, E. P. Bennett, William C. Bennett.
HUNTINGTON, James H. Shelton.
NEW CANAAN, Samuel S. Noyes, Lewis Richards.
NORWALK, John A. McLane, Ira Gregory, Samuel Lynes, Jno. McLane.
South Norwalk, M. B. Pardee.
Redding, George W. Birch.
RIDGEFIELD, O. S. Hickock.
STAMFORD, N. D. Haight, Lewis Hurlburt.
DARIEN, Samuel Sands.
STRATFORD, Wm. T. Shelton, James Baldwin, R. C. McEwin.
TRUMBULL, George Dyer.
WESTPORT, George Blackman, David S. Burr.
GREENWICH, J. H. Hoyt.

WINDHAM COUNTY.

WM. H. COGSWELL, M. D., Chairman.

JAMES B. WHITCOMB, M. D., Clerk.

ASHFORD, John H. Simmons.
BROOKLYN, Jas. B. Whitcomb, Wm. Woodbridge.
CANTERBURY, Elijah Baldwin, Joseph Palmer.
CHAPLIN, Orrin Witter.
HAMPTON, Dyer Hughes, Jr.
Daysville, Justin Hammond.
South Killingly, Daniel A. Hovey.
West Killingly, Samuel Hutchins, David E. Hall.
East Killingly, Edwin A. Hill.
Putnam, H. W. Hough, Gideon F. Barstow.
PLAINFIELD, WM. H. COGSWELL.
Moosup, Lewis E. Dixon.
Centreville, Charles H. Rogers.
STERLING, Wm. A. Lewis.
VOLUNTOWN, Harvey Campbell.
THOMPSON, Lowell Holbrook, John McGregor.
Woodstock, Lorenzo Marcy.
North Woodstock, Asa Witter, Ebenezer Witter.
West Woodstock, Milton Bradford.
POMFRET, Hiram Holt, Lewis Williams.
WINDHAM, Chester Hunt.
Scotland, Calvin B. Bromley.

LITCHFIELD COUNTY.

HENRY M. KNIGHT, M. D., Chairman.

G. B. MILLER, M. D., Clerk.

LITCHFIELD, J. G. Beckwith, H. W. Buell, D. E. Bostwick.
South Farms, Garry H. Miner.
CANAAN, Ithamar H. Smith, A. A. Wright.
Sauth Canaan, John A. Gillett.
CORNWALL, Burritt B. North.
West Cornwall, Samuel W. Gold, Edward Sandford.
Gaylord's Bridge, G. H. St. John.

GOSHEN, A. M. Huxley.
HARWINTON, G. B. Miller.
KENT, Wells Beardsley.
NEW MILFORD, Jehiel Williams.
BRIDGEWATER, Horace Judson.
NORTHFIELD, D. B. W. Camp.
NORFOLK, Wm. W. Welch, John H. Welch.
PLYMOUTH, Samuel T. Salisbury.
Plymouth Hollow, Wm. Woodruff.
ROXBURY, Myron Downes.
Lakeville, Benjamin Welch, William Bissell, H. M. Knight.
SHARON, Ralph Deming, Wm. W. Knight.
Wolcottville, E. Bancroft, J. W. Phelps.
WARREN, John B. Derickson.
WASHINGTON, R. M. Fowler.
New Preston, S. H. Lyman, E. P. Lyman.
West Winsted, James Welch, J. W. Bidwell.
WOODBURY, Charles H. Webb, Harmon W. Shove.

MIDDDLESEX COUNTY.

R. W. MATHEWSON, M. D., Chairman.

S. W. TURNER, M. D., Clerk.

MIDDLETOWN, Joseph Barrett, Chas. Woodward, Elisha B. Nye, George W. Burke, John E. Blake, Rufus Baker.
CROMWELL, Ira Hutchinson.
East Hampton, F. G. Edgerton.
Middle Haddam, A. B. Worthington.
CHESTER, S. W. Turner.
CLINTON, D. H. Hubbard.
DURHAM, R. W. Mathewson.
EAST HADDAM, Asa M. Holt, Datus Williams.
HADDAM, Miner C. Hazen.
PORTLAND, George O. Jarvis, G. C. H. Gilbert.
SAYBROOK, Asa H. King.
Essex, A. H. Hough, C. H. Hubbard.
Deep River, Edwin Bidwell, N. Nickerson.
Westbrook, Horace Burr.

TOLLAND COUNTY.

WM. H. RICHARDSON, M. D., Chairman.

GILBERT H. PRESTON, M. D., Clerk.

TOLLAND, O. K. Isham, G. H. Preston.
BOLTON, Charles F. Sumner.
North Coventry, Eleazer Hunt.
South Coventry, Timothy Dimock, Henry S. Dean.
HEBRON, Orrin C. White.
Mansfield Centre, Earl Swift, O. B. Griggs.
Mansfield Depot, Norman Brigham.
MANSFIELD, Wm. H. Richardson.
SOMERS, Orson Wood.
East Stafford, Wm. N. Clark.
West Stafford, J. C. Blodgett.
Stafford Springs, C. B. Newton.
Staffordville, S. F. Pomeroy.
Rockville, Alden Skinner, Stephen G. Risley, John B. Lewis.
WILLINGTON, Francis L. Dickinson.
VERNON, N. G. Hull.

SUMMARY OF ORDINARY MEMBERS FOR 1861; WITH DEATHS REPORTED FOR THE YEAR ENDING APRIL 1, 1861.

	Total.	Deaths.
Hartford County,	70	1
New Haven County,	72	0
New London County,	39	0
Fairfield County,	33	0
Windham County,	29	0
Litchfield County,	37	1
Middlesex County,	24	1
Tolland County,	21	0
	325	3

NOTE.—Former Fellows of the Connecticut State Society are *permanent members* of the Annual Convention, having the privilege of attending all meetings and performing all the duties of Fellows, except voting. All the members of the Society are invited to be present at the meetings of the Convention.

DEATHS OF MEMBERS DURING THE YEAR ENDING APRIL 1, 1861, WITH THE AGE AND DISEASE SO FAR AS ASCERTAINED.

		Age.	Disease.
Hartford County,	Wm. S. Pierson,		
Litchfield County,	George Seymour,		
Middlesex County,	Frederick W. Shepherd,	48 yrs.	Pneumonia.

DUTIES OF COUNTY CLERKS.

To warn County Meetings.

To record the proceedings of the County Meetings.

To collect the taxes and pay the same to the Treasurer.

To transmit to the Secretary a list of the elected Fellows, and the person recommended as a candidate for a gratuitous course of lectures, immediately after the County Meetings, for publication.

To make certificates of Fellowship, to be transmitted to the Secretary, on or before the first day of the Convention.

To transmit to the Treasurer the names of the Fellows elect, immediately after the County Meetings.

To return to the Treasurer the names of Members delinquent on taxes, with the amounts severally due from each.

To transmit duplicate lists of the Members of the Society to the Secretary and Treasurer, on or before the first day of the Convention, on penalty of five dollars for each neglect.

To report to the Secretary of the State Society, on the first day of its Annual Convention, the names, ages, and diseases of the Members of this Society who have died during the year preceding the 1st of April in each year, in their several County Societies.

RULES OF ORDER.

1. Organization.
2. Certificates of Membership presented and read by the Secretary.
3. Committee on the Election of Fellows.
4. Address of President.
5. Election of Officers for ensuing year.
6. Unfinished business of previous year disposed of.
7. Reception and reference, without debate, of Communications, Resolves, &c., from the several Counties, and Members of the Convention.
8. Reading Treasurer's Report.
9. Committee to audit the same.
10. Committee on Debentures.
11. Standing Committees appointed.
12. Committee to nominate Delegates to National Convention.
13. Committee on Candidates for Gratuitous Course of Lectures.
14. Committee on Honorary Degrees and Honorary Memberships.
15. Committee to nominate Dissertator.
16. Dissertation.
17. Reports of Committees appointed on County Communications, Resolves, &c.
18. Reports of Standing Committees.
19. Reports of Committees in the order in which business was brought forward in Convention.
20. Miscellaneous Business.

LIST OF ADDRESSES AND DISSERTATIONS

DELIVERED IN CONVENTION.

1793 President's Address, by Dr. Leaveritt Hubbard.
1794 Prize Essay on Autumnal Bilious Fever, by Dr. S. H. P. Lee.
1794 Prize Essay on the Properties of Opium, by Dr. Gideon Shepherd.
1795 Eulogy on Dr. L. Hubbard, by Dr. Eneas Munson, President.
1795 Prize Essay on the Preparation of Antimony, by Dr. F. P. Ouviere.
1795 Prize Essay on the Different Species of Colic, by Dr. Thaddeus Betts.
1796 Prize Essay on the Contagion of Yellow Fever, by Dr. F. P. Ouviere.
1796 Prize Essay on Cynanche Tonsillaris, by Dr. S. H. P. Lee.
1796 Prize Essay on the Most Eligible Mode of Increasing Medical Knowledge in this State, by Dr. Lewis Collins.
1796 Prize Essay on the same subject, by Dr. Gideon Shepherd.
1798 History of a case of Bilious Concretion, by Dr. Lemuel Hopkins.
1798 An Essay by Dr. Jared Potter.
1799 A Dissertation, by Dr. Thaddeus Clark.
1800 A Dissertation on Lunacy, by Dr. Nathaniel Dwight.
1804 Essay on the Stafford Mineral Waters, by Dr. Samuel Willard.
1812 Essay on the necessity of a Hospital for Lunatics in this State, by Dr. Nathaniel Dwight.
1817 Dissertation on the Deleterious Effects of Ardent Spirits, by Dr. W. R. Fowler.
1818 On Ergot, by Dr. William Buel.
1820 Dissertation on Typhus Fever, by Dr. Thomas Miner.
1821 Dissertation on Uterine Hemorrhage by Dr. Samuel Rockwell.
1822 Dissertation on the Yellow Fever at Middletown, by Dr. William Tully.
1823 Dissertation, by Dr. Dyer T. Brainard.
1829 Dissertation on extra-uterine Conception, by Dr. George Sumner.
1830 Dissertation on Diseases of the Ear, by Dr. Charles Hooker.

1835 Dissertation on the Vitality of the Blood, by Dr. Benjamin Welch, Jr.
1836 Influence of Moral Emotions on Disease, by Dr. E. H. Bishop.
1837 An Address by the President, Dr. Thomas Miner.
1837 A Dissertation on Scarlet Fever, by Dr. Archibald Welch.
1838 A Dissertation on Spinal Irritation, by Dr. Isaac G. Porter.
1839 A Dissertation on the Mental Qualifications necessary to a Physician, by Dr. Henry Bronson.
1840 A Dissertation on the Advantages of Prompt and Efficient Practice in Acute Diseases, by Dr. Richard Warner.
1841 An Address by the President, Dr. Silas Fuller.
1841 A Dissertation on Insanity as a subject of Medical Jurisprudence, by Dr. Amariah Brigham.
1842 A Dissertation on Uterine Irritation, by Dr. Chas. Woodward.
1843 An Address by the President, Dr. Elijah Middlebrook.
1843 A Dissertation on Phlebitis, by Dr. Pinckney W. Ellsworth.
1844 A Dissertation on the Respect due to the Medical Profession and the Reasons that it is not awarded by the Community, by Dr. Worthington Hooker.
1845 A Dissertation on Laryngismus Stridulus, by Dr. N. B. Ives.
1846 A Dissertation, Practical Observations on Typus Fever, by Dr. Theodore Sill.
1847 A Dissertation on the Importance of a Medical Organization and the Advantages resulting from it, by Dr. E. K. Hunt.
1848 A Dissertation on Some Forms of Non-Malignant disease of the Cervix Uteri, by Dr. B. Fordyce Barker.
1849 An Address by the President, Dr. Archibald Welch.
1849 A Dissertation on Hygiene, by Dr. Alvan Talcott.
1850 A Dissertation on Medical Jurisprudence, by Dr. Johnson C. Hatch.
1851 An Address by the President, Dr. George Sumner, on the Early Physicians of Connecticut.
1853 An Address by the President, Dr. Rufus Blakeman, on the Early Physicians of Fairfield County.
1853 A Dissertation on Popularizing Medicine, by Dr. S'l Beach.
1854 A Dissertation on Diseased Cervix Uteri, by Dr. Wm. B. Casey.
1855 A Dissertation on Registration as the Basis of Sanitary Reform, by Dr. Stephen G. Hubbard.
1857 An Address by the President, Dr. Benjamin H. Catlin.
1857 A Dissertation on the Medical Profession, by D. Benj. D. Dean.
1858 An Address by the President, Dr. Benjamin H. Catlin.
1859 An Address by the President, Dr. Ashbel Woodward.
1859 A Dissertation on the Issue, by Dr. Rufus Baker.
1860 An Address by the President, Dr. Ashbel Woodward.
1860 A Dissertation by Dr. A. B. Haile.
1861 An Address by the President, Dr. Ashbel Woodward.
1861 A Dissertation by Dr. J. B. Lewis.

APPENDIX A.

THE Committee of Publication reappointed by the last Convention, would report, that they met in Hartford, on the 20th inst., and examined the several papers which (at a late day) had been forwarded to them, and recommend the following for publication in the usual form, with the transactions of the Convention, viz:

A paper entitled a Sanitary Report from Hartford County, by L. S. Wilcox, M. D.; also a Biographical Sketch of the late Wm. S. Pierson, M. D., by A. Morrison, M. D., both read before the Medical Meeting for Hartford County. A paper containing a Biographical Sketch of George Seymour, M. D., by J. G. Beckwith, M. D., read before the Litchfield County Medical Meeting. A Biographical Sketch of F. W. Shepard, M. D., which was read before the Middlesex County Medical Meeting, by S. W. Turner, M. D. A Biographical Sketch of Reynold Webb, M. D., by Joel Canfield, M. D.; also a Biographical Sketch of Anson Moody, M. D., by B. H. Catlin, M. D., both read before the New Haven County Medical Meeting. The Committee are informed that an additional paper was read in the New Haven County Medical Meeting, which was a Biographical Sketch of Wm. Tully, M. D., by Henry Bronson, M. D. The paper did not reach the committee for perusal, but they would recommend that Dr. Bronson be requested to read it before the Convention immediately after the reading of this report.

Your Committee are bound in duty to express their regret, which amounts almost to discouragement, in the work assigned them; owing to the mortifying fact that so few papers are produced for publication in the volume of the Society's transactions. And especially that there has been a marked falling off of dissertations before County Meetings for the past two years; for from the eight

County gatherings which constitute the Society at large, but one scientific paper has been sent to the Committee during the past year.

Another source of embarassment is the tardiness of many of the officers of County Meetings in forwarding promptly and in time such papers as have been referred to this Committee.

Your Committee are, however, gratified to note an increasing interest on the part of members to place upon the pages of the Society's annual proceedings as an enduring record, historical sketches of the lives—mementos of respect and affection for the names and characters of those brethren who are from time to time removed by death. These Biographical Sketches greatly enhance the value of the transactions, and contribute to the interest of the members in the same; whilst they evince a just fraternal bond of union and sympathy which should ever exist among members of the medical profession.

That portion of the President's Address in the year 1859, which was referred to this Committee, relating to the establishment of a periodical Magazine under the direction of the Society, and devoted to its interests, has been duly considered; and whilst they are not of the opinion that the time has yet arrived for the practicability of the enterprise recommended and ably presented by the President, yet the Committee believe that some of the desirable objects sought might be secured by adopting some measures which would enlist more interest in the present publication of the Society. It has been suggested to the Committee that an alteration in the form of the pamphlet might conduce to this desirable end. It has been and is at the present time, the custom to so arrange the matter in the transactions that each year's proceedings constitutes a small book or pamphlet by itself, too small for binding, and without index or table of contents for convenience of reference. The consequence of which is that they are liable to be thrown aside amongst the rubbish papers of the Physician's office, to be mutilated and lost. Possibly this imperfect form of the Society's publications may account in some measure for the apparent backwardness there is among members in writing for it, and for the lack of exertion somewhat prevalent in the various County branches of this organization, to secure the publication of such papers as are produced and read before their respective meetings. With these views, and

in order to meet some of the wants, ably urged by the President in his annual address of 1859, which were referred and re-referred in 1860, to this Committee, they beg leave to report the following resolutions for the consideration and action of this Convention.

Resolved, That the Secretary of the State Medical Society hereafter be requested to so compile the material designed for publication by the Society that each year's pamphlet shall constitute one number of a volume, and that four numbers, or four of the annual proceedings shall constitute the volume; that they be so paged that the volume commence with the year 1860; also that an index be placed in the fourth or last number of the volume, and that a table of contents be placed upon the first page of each number. Also,

Resolved, That officers and members of the several County organizations are earnestly requested to use all reasonable exertion to procure material in the form of dissertations and voluntary communications for publication in the transactions.

P. G. ROCKWELL, M. D., *Chairman.*

APPENDIX B.

THE Committee appointed by the Convention of 1860 to consider the question of reorganizing the State Medical Society on a more voluntary basis, would respectfully

REPORT,

That, in their opinion, the need of a reform is evident and urgent.

The honored founders of our State Society, in 1792, obtained from the Connecticut Legislature a charter on the ground that "well regulated Medical Societies have been found to contribute to the diffusion of true science, and particularly to the knowledge of the healing art." A preamble to certain resolutions adopted by the Fairfield County Medical Society, two years after, aptly expresses the views then prevailing: "Whereas the material end, use and design of the Medical Society of Connecticut was to diffuse and cultivate medical knowledge among the faculty." To cultivate and diffuse medical knowledge among the profession, this was the grand object had in view by the originators of our medical organization. It is our duty, at this time, to inquire how thoroughly we are carrying out their intentions.

As a means for the cultivation of medical science, and especially for the dissemination of medical information, is this Society doing what it should, after an experience of sixty-nine years? Does it stand, in these respects, on an equality with kindred Societies in other States? To both these questions we must answer no. As an organization, this Society fails, in any appropriate degree, to develop the talent or professional zeal of its members, or to make use of the experience they have acquired for the general good. It

fails to secure the good will of many of its members, while an increasing proportion of regular physicians in the State refuse it even the support of their names. The mere formalities of routine business and discussions upon taxes consume the time of its Conventions, while the County Meetings are conducted in the same unprofitable style.

The question naturally arises, what is the cause of this inefficiency—what the practical defect that thus defeats the chief purpose of our organization? It may be attributed in great measure to whatever dissevers the members at large from a personal attendance upon, and interest in the transactions of the State Society, to whatever takes from each the sense of his individual responsibility to sustain and elevate the organization of which he is a member. The paying of certain ones to attend the Society's meeting operates in this way; so does the lack of attractiveness in the Society's annual gathering. Here then, are two openings for reform, and to meet the case your Committee bring forward *two propositions.*

I. To abolish the system of debentures, or payment of Fellows for attendance on Conventions; and II. To make every endeavor to render the Society's Annual Meeting of sufficient interest and profit to call out a general attendance.

Besides the apparent exclusiveness of the debenture system, its evils are, first, the dissatisfaction it produces among the members generally, who justly feel that they receive no suitable equivalent for their annual tax, since the greater portion of it is appropriated to the personal expenses of a few Fellows.

Increasing this discontent is, secondly, the inequality of the distribution among members of moneys returned by the debenture bills to the Counties. In one County, (Fairfield,) twenty-six out of fifty representations of that County in Conventions, from 1840 to 1850, were made by five individuals, these five thus holding claims for an attendance of more than half the time, a paying business for them.

A third evil is the waste of time in Convention by fruitless discussions over arrearages of discontented delinquents, not to speak of the hard feelings engendered thereby between the Counties.

While, fourth, is the unreasonableness of the amount allowed each Fellow for traveling expenses, whether we consider what the

expense of travel really is, or how much less an expenditure of time and money is now required, than before the day of railroads.

On the other hand, the money saved by the abolition of the debenture system may be so appropriated as to bring a satisfactory return to each member, besides stimulating the zeal of the more literary in the way of prizes. For example, in Massachusetts, where the Fellows receive no pay for their services, each member of the Medical Society for his three dollar tax receives, 1. Braithwaite's Retrospect, 2 volumes, subscription price $2; 2. Copy of State Transactions; 3. Blanks for return of zymotic diseases; 4. a good social dinner provided for all attending the Convention, which averages five or six hundred of eight hundred members; while 5. a quarter of each one's tax, viz., seventy-five cents, is returned to the district society of which he is a member, to be applied to local expenses. Besides which, premiums for essays are offered, and volumes of various medical works reprinted and distributed to the Society. It should be stated that the Massachusetts Society have in addition a fund, the income of which, however, until recently, has furnished but a fourth of their resources, or about the amount returned to the local societies. Can we not in Connecticut do as well as this, at least as far as our limited means will allow?

But will members of our Society officiate as Fellows, if they are not to be paid for their services? Little difficulty need be apprehended on this score, provided the Society carry out your Committee's second proposition—to make the Convention sufficiently interesting to call out a general attendance. To effect this, let the State Convention be made a Mass Meeting of the physicians of the State, its exercises of a literary character, embracing medical reports, essays and discussions. Premiums for essays may be offered to arouse competition, while a well-conducted social dinner would prove a great attraction.

Routine business, election of officers, &c., may be transacted by Fellows elected under our present charter, some time, say evening before the General Convention. This business meeting to be open to all members, who as now will have the right to speak, but not to vote.

It will be observed that the reforms suggested will require no legislative interposition for the modification of our charter, since they will be affected by a simple alteration of our by-laws.

Your Committee have recommended these reforms on the ground that thus a main object of the Society in cultivating and diffusing medical information will be promoted. But a motive more powerful than this urges upon us reform. It is a question of life or death with the Society. Its very existence is at stake. Go on as we have done for a few years past and what will be the result? Look at the facts. In 1844 the Society attained its highest number of taxable members, 378; by regular decrease these had fallen in 1850, six years, to 347; in 1860, ten years more, to 250. A loss in sixteen years of 128; in the last ten years of nearly 100 taxable—we can not say tax-paying members—and although the exempts have swelled from thirty-four to seventy, there is still a net loss of nearly a fourth of the number in 1844. This in the face of a large increase of our State population, and presumably a large increase of medical men. At this rate it is a mere question of time when our organization is to become extinct.

But in any attempt at reform, every member of the Society must understand and feel the individual responsibility that rests upon each alike. It is imperative that each one do what in him lies to carry the reform into efficient operation, if the organization is to be raised again to health and usefulness. Without such united and hearty endeavor, any movement of the Society in the line of reform will prove to be but the convulsive struggle that precedes its speedy dissolution.

Relying then upon the earnest co-operation of every member of the Society, your Committee would recommend the following

RESOLUTIONS.

1st. *Resolved*, That so much of the by-laws of this Society, as relates to debenture bills, be hereby repealed.

2d. *Resolved*, That in future Conventions, the business and literary meetings be held distinct; that a Committee of five be appointed at each Convention, three of whom shall be resident at or in the vicinity of the town where the Convention shall next be held, whose duty it shall be to make arrangements for the literary meeting; to solicit medical papers for the meeting; to examine the same and adjudge such prizes as the Society may offer; and to provide for a dinner, the expense of which shall be defrayed from the

funds of the Society, and the Chairman be chosen by the preceding Convention.

3d. *Resolved*, That the by-laws exempting members over sixty years of age and the County Clerks, from taxation, be hereby repealed.

4th. *Resolved*, That such Medical publications as the Society's finances warrant, be distributed under direction of the Committee of Publication, to those members whose taxes are not in arrears.

5th. *Resolved*, That in future, the Conventions be held in the several Counties.

CHARLES L. IVES, *Chairman.*

PROCEEDINGS.

The *Seventieth* Annual Convention of the Connecticut Medical Society was held in the city of Bridgeport, May 28th, and 29th, 1862.

The Convention was called to order by E. K. Hunt, M.D., Vice-President, at 11 o'clock, A. M.

The Secretary having read the list of Fellows returned by the Clerks of the several county meetings, Drs. G. W. Russell and M. Manning, were appointed a committee on Credentials.

Dr. Russell, Chairman, reported the following list of Fellows for the present year, viz:

HARTFORD COUNTY.

S. L. Child, M. D.
G. W. Russell, "
J. C. Jackson, "
†F. A. Hart, M. D.
D. Crary, "

NEW HAVEN COUNTY.

David A. Tyler, M. D.
Leonard J. Sanford, "
Lewis Barnes, "
Asa H. Churchill, M. D.
Alvan Talcott, "

NEW LONDON COUNTY.

Mason Manning, M. D.
Ashbel Woodward, "
†N. M. Tribou, "
†Robert McCurdy Lord, M. D.
†Elijah Dyer, "

† Absent.

LITCHFIELD COUNTY.

Ralph Deming, M. D.
†H. W. Buell, "
†J. W. Phelps, "
R. M. Fowler, M. D.
H. M. Knight, "

FAIRFIELD COUNTY.

†N. D. Haight, M. D.
D. S. Burr, "
Robert Hubbard, "
Samuel Noyes, M. D.
H. N. Bennett, "

WINDHAM COUNTY.

Joseph Palmer, M. D.
Lewis Williams, "
†Wm. Woodbridge, "
†Edwin A. Hill, M. D.
†Lewis E. Dixon, "

MIDDLESEX COUNTY.

Miner C. Hazen, M. D.
†G. C. H. Gilbert, "
John E. Blake, M. D.

TOLLAND COUNTY.

Stephen F. Pomeroy, M. D.
Wm. H. Richardson, "
N. G. Hall, M. D.

The Vice-President appointed the following Committees, viz:

On Unfinished Business of the last year:

Drs. D. Crary, M. Manning, S. S. Noyes, J. E. Blake, D. A. Tyler, J. Palmer, R. Deming and N. G. Hall.

On Candidates for Gratuitous Course of Lectures:

Drs. L. J. Sanford, J. Palmer and R. Deming.

On Honorary Degrees and Honorary Membership:

Drs. A. Woodward, A. Talcott and D. S. Burr.

To nominate Dissertator and Alternate:

Drs. G. W. Russell, D. A. Tyler and Wm. H. Richardson.

Drs. H. N. Bennett and D. H. Nash, were appointed a committee to receive and introduce Delegates from Medical Societies of other States.

Dr. J. E. Blake presented a communication from the Middlesex County Medical meeting, stating that Dr. Ambrose Platt, of Ches-

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† Absent.

ter, had been expelled for consulting with irregular practitioners of Medicine.

On motion by Dr. R. Hubbard, it was

Resolved, That the action of Middlesex county meeting in the expulsion of Dr. Pratt, be ratified by this Convention.

Dr. Mason Manning presented a communication from the New London county meeting, petitioning for the Honorary degree of Doctor of Medicine to be conferred on Dr. John Gray, of Mystic River,—the communication was referred to the committee on Honorary Degrees and Honorary Membership.

The Treasurer read his report.

Committee to audit Treasurer's account, Drs. J. C. Jackson and A. Woodward—The account, on examination, was found to be correct and was so reported by Dr. Jackson, Chairman. Report accepted.

The following, is a general summary:

Cash in Treasury, - - - - - -		$1.04
Due from Clerks, - - -	$1400.57½	
Deduct one half for commissions, bad debts, abatements, &c., - - -	700.28½	
Leaves - - - - - -		700.28½
Total of Cash and Due, - - -		$701.32½
The Society owes for outstanding debentures and bal. on printing acct., - - - -		611.08½
Leaves balance of - - - -		$90.24

On ballot, John G. Adams, M. D., and Jared Lindsley, M. D., of New York city, were elected Honorary members of this Society.

Adjourned to 2½ o'clock, P. M.

Afternoon Session.

Usher Parsons, M.D., of Providence, was introduced as a Delegate from the Rhode Island Medical Society.

On motion by Dr. Bennett,

Resolved, That Dr. Parsons, and other Delegates who may arrive, be received as guests of the Society, and that the committee of arrangements be directed to provide for their accommodation at the Sterling House.

The reading of the annual Address, by the President, was deferred until 12 o'clock, A. M., Thursday.

The election of Officers being next in order, Drs. D. S. Burr and H. M. Knight, were appointed Tellers.

The following gentlemen were duly elected, viz:

JOSIAH G. BECKWITH, M.D., PRESIDENT.
EBENEZER K. HUNT, M.D., VICE-PRESIDENT.
GEORGE O. SUMNER, M.D., TREASURER.
LEONARD J. SANFORD, M.D., SECRETARY.

The following gentlemen were appointed by the President to nominate candidates for the vacancies in the Standing Committees, viz:

Hartford county, S. L. Child; New Haven county, Lewis Barnes; New London county, Mason Manning; Windham county, Joseph Palmer; Fairfield county, D. S. Burr; Litchfield county, Ralph Deming; Middlesex county, M. C. Hazen; Tolland county, S. F. Pomeroy.

The report of the Committee on Examination—Dr. Joel Canfield, Sec'y,—was read and accepted and its publication ordered with the Proceedings. [vide Appendix A.]

The report of the Committee on Publication, read by Dr. P. M. Hastings, acting Chairman, was accepted and ordered published. [vide Appendix B.]

The Committee appointed to act as an advisary Board to the Governor, in the appointment of Surgeons and Assistant Surgeons to the Connecticut Volunteers, (see Proceedings for 1861, pp. 28–9,) reported through Dr. G. W. Russell, Chairman.

On motion of Dr. E. K. Hunt, it was *voted* to publish the report [vide Appendix D], and the advisary Board were requested to make a report, annually, to this Society.

Dr. Russell, Chairman of Committee to nominate the Dissertator for the ensuing year, reported the names of J. C. Jackson, M.D., of Hartford, as Dissertator, and Robert Hubbard, M.D., of Bridgeport, as Alternate.

On motion, the nominations were confirmed by the Convention.

Dr. Sanford, Chairman of Committee on Gratuitous Students, recommended the following list, viz:

Charles J. Tennant, of Hartford County.
Benjamin M. Page, of New Haven County.
John M. Browne, of Tolland County.
Albert G. Browning, of Windham County.
Francis J. Young, of Litchfield County.
Frederick S. Treadway, from the State at large.

The report was accepted and the gentlemen designated, appointed.

The Committee on Nominations reported the following list of names to fill the Standing Committees, viz:

S. L. Child, M. D., } Committee on Examination.
Lewis Barnes, M. D., }

Isaac G. Porter, M. D., } Committee to nominate Physician to
John E. Blake, M. D., } Retreat for Insane.

Joseph Palmer, M. D., } Committee to nominate Professors in
Ralph Deming, M. D., } Medical Institution of Yale College.

Miner C. Hazen, M. D., } Committee of Publication.
Charles L. Ives, M. D., }

David Crary, M. D.,—Committee on Registration.

On ballot, the above were elected.

The reports of the Committees on Registration, and on Honorary Degrees and Honorary Membership, were deferred until tomorrow morning.

The Committee of Arrangements gave notice that Dinner would be provided for the members of the Society and its guests, at the Sterling House, at 2 o'clock P. M., Thursday. They nominated Jonathan Knight, M. D., of New Haven, as Presiding officer, in place of Wm. B. Nash, M. D., of Bridgeport, who will be, necessarily, absent. Dr. Knight was accordingly chosen.

An invitation from Dr. Robert Hubbard, to pass this evening sociably at his house, was accepted.

The following Delegates were appointed to attend the next Annual Meeting of the Rhode Island Medical Society, viz:

Hartford County,	J. C. Jackson, M. D.
New Haven "	L. J. Sanford, "
New London "	A. Woodward, "

Windham County,	Lewis Williams,	M. D.
Fairfield "	R. Hubbard,	"
Litchfield "	J. G. Beckwith,	"
Middlesex "	G. C. H. Gilbert,	"
Tolland "	Wm. H. Richardson,	"

The following, were appointed Delegates to the next Annual Meeting of the Massachusetts Medical Society, viz:

Hartford County,	S. L. Child,	M. D.
New Haven "	A. Talcott,	"
New London "	M. Manning,	"
Windham "	J. Palmer,	"
Fairfield "	S. S. Noyes,	"
Litchfield "	H. Shove,	"
Middlesex "	C. Woodward,	"
Tolland "	S. G. Risley,	"

On motion of Dr. H. N. Bennett, three Delegates were appointed to represent the Society at the next Annual Meeting of the New York State Medical Society, as follows, viz:

Drs. E. K. Hunt, H. M. Knight and J. G. Beckwith.

On motion of Dr. Sumner, three Delegates were appointed to the next Annual Meeting of the New Jersey Medical Society, viz:

Drs. C. A. Lindsley, D. H. Nash and J. C. Jackson.

Dr. Ashbel Woodward moved that a tax of two dollars be laid upon all members of the State Society, payable on the 1st, day of June, 1862. Passed.

An invitation from Tolland county Medical Meeting to hold the next annual Convention in Rockville, was accepted, and the following gentlemen were appointed a Committee of Arrangements, viz:

Francis L. Dickinson,	M.D.
Alden Skinner,	"
Stephen G. Risley,	"
Gilbert H. Preston,	"
Stephen F. Pomeroy,	"

Dr. Richardson nominated Dr. F. L. Dickinson, to be the presiding officer at the annual dinner of the next Convention. Passed.

Adjourned to 10 o'clock A. M., to-morrow.

Thursday, May 29th, 1862.

Convention was called to order by the President, when Prayer was offered by Rev. Mr. Willey, of Bridgeport.

Dr. Ashbel Woodward, Chairman of Committee on Honorary Degrees and Honorary Membership, nominated A. J. Fuller, M. D., of Bath, Maine, for Honorary Membership. The Committee also reported on the case of Dr. John Gray, of Mystic River, recommending "that the Committee on Examination, of the Connecticut Medical Society, be directed to grant Dr. Gray a license to practice Medicine, should he be found worthy." The report was accepted and its recommendations approved.

The report of the Committee on Registration, read by Dr. B. H. Catlin, Chairman, was accepted and ordered published. [vide Appendix C.]

Dr. E. K. Hunt moved that the report of the Sanitary Committee of Hartford County for 1861, be published with the Proceedings. Passed.

On motion of Dr. Woodward, it was

Resolved, to publish 750 copies of the Proceedings for the use of the members of the Society.

On motion of Dr. Sumner, it was

Resolved, That the Secretary and Clerks be directed to transmit the Proceedings *by mail*, and that *without pre-payment of postage*, provided they can be allowed by Post Masters thus to do.

The President then gave the annual Address.

Dr. Wm. Woodruff moved that the thanks of the Convention be presented to Dr. Beckwith for his able and valuable Address, and that a copy be requested for publication. Adopted.

Dr. Moses C. White, alternate Dissertator, read an elaborate review of the present state of the question of Spontaneous Generation.

By special request of Dr. White he was excused from presenting the paper for publication.

Dr. H. N. Bennett exhibited a patient on whom he had performed resection of the shoulder joint for the removal of an *Enchondromatous* tumor which invested the head and surgical neck of the Humerus. Four inches of the shaft were removed with the head—

the wound healed kindly. The operation was performed three months ago, and the patient is now able to perform pronation and supination of the fore-arm, and abduction and adduction of the entire limb, to a limited extent.

On motion of Dr. Woodward, a vote of thanks was tendered the Bridgeport City Medical Association, for the refined and generous hospitality extended to the members of the Convention.

Adjourned *sine die.*

Attest, L. J. SANFORD, *Secretary.*

OFFICERS OF THE SOCIETY,

FOR 1862–63.

PRESIDENT.
JOSIAH G. BECKWITH, M. D., OF LITCHFIELD.

VICE-PRESIDENT.
EBENEZER K. HUNT, M. D., OF HARTFORD.

TREASURER.
GEORGE O. SUMNER, M. D., OF NEW HAVEN.

SECRETARY.
LEONARD J. SANFORD, M. D., OF NEW HAVEN.

STANDING COMMITTEES.

Committee on Examination.

JOSIAH G. BECKWITH, M. D., *ex officio.*
WILLIAM WOODRUFF, M. D.
HORACE BURR, M. D.
MILTON BRADFORD, M. D.
S. L. CHILD, M. D.
LEWIS BARNES, M. D.

Committee to nominate Physician to Retreat for the Insane.

ROBERT HUBBARD, M. D.
HENRY W. BUELL, M. D.
GILBERT H. PRESTON, M. D.
ISAAC G. PORTER, M. D.
JOHN E. BLAKE, M. D.

Committee to nominate Professors in the Medical Institution of Yale College.

D. H. HUBBARD, M. D.
ROBERT A. MANWARRING, M. D.
H. M. KNIGHT, M. D.
JOSEPH PALMER, M. D.
RALPH DEMING, M. D.

Committee of Publication.

ROBERT HUBBARD, M. D.
HENRY W. BUELL, M. D.
HENRY BRONSON, M. D.
MINER C. HAZEN, M. D.
CHARLES L. IVES, M. D.

Committee on Registration.

E. K. HUNT, M. D.
PLINY A. JEWETT, M. D.
DAVID CRARY, M. D.

MEMBERS OF THE SOCIETY.

HONORARY MEMBERS.

*FELIX PASCALIS,	New York City.
*JAMES JACKSON,	Boston, Mass.
*JOHN C. WARREN,	Boston, Mass.
*SAMUEL L. MITCHILL,	New York City.
*DAVID HOSACK,	New York City.
*WRIGHT POST,	New York City.
BENJAMIN SILLIMAN,	New Haven.
*GEORGE M'CLELLAN,	Philadelphia, Pa.
*JOHN MACKIE,	Providence, R. I.
*CHARLES ELDREDGE,	East Greenwich, R. I.
*THEODRIC ROMEYN BECK,	Albany, N. Y.
*JAMES THATCHER,	Plymouth, Mass.
EDWARD DELAFIELD,	New York City.
JOHN DELAMATER,	Cleveland, Ohio.
*WILLIAM P. DEWEES,	Philadelphia, Pa.
*JOSEPH WHITE,	Cherry Valley, N. Y.
JACOB BIGELOW,	Boston, Mass.
WALTER CHANNING,	Boston, Mass.
*PHILIP SYNG PHYSIC,	Philadelphia, Pa.
*LEWIS HEERMAN,	U. S. Navy.
*DANIEL DRAKE,	Cincinnati, Ohio.
*HENRY MITCHELL,	Norwich, N. Y.
NATHAN RYNO SMITH,	Baltimore, Md.
VALENTINE MOTT,	New York City.
*SAMUEL WHITE,	Hudson, N. Y.
REUBEN D. MUSSEY,	Cincinnati, Ohio.
*WILLIAM TULLY,	Springfield, Mass.
RICHMOND BROWNELL,	Providence, R. I.

* Deceased.

*WILLIAM BEAUMONT, - -	St. Louis, Mo.
SAMUEL HENRY DICKSON, -	Philadelphia, Pa.
*SAMUEL B. WOODWARD, -	Northampton, Mass.
*JOHN STEARNS, - - -	New York City.
STEPHEN W. WILLIAMS, - -	Deerfield, Mass.
*HENRY GREEN, - - -	Albany, N. Y.
*GEORGE FROST, - - -	Springfield, Mass.
WILLARD PARKER, - - -	New York City.
*BENAJAH TICKNOR, - -	U. S. Navy.
ALDEN MARCH, - - -	Albany, N. Y.
*AMOS TWITCHELL, - - -	Keene, N. H.
CHARLES A. LEE, - - -	New York City.
*DAVID S. C. H. SMITH, - -	Providence, R. I.
*JAMES M. SMITH, - - -	Springfield, Mass.
HENRY D. BULKLEY, - -	New York City.
J. MARION SYMS, - - - -	New York City.
JOHN WATSON, - - -	New York City.
FRANK H. HAMILTON, - -	Brooklyn, L. I.
ROBERT WATTS, - - -	New York City.
J. V. C. SMITH, - - - -	Boston, Mass.
O. WENDELL HOLMES, - -	Boston, Mass.
JOSEPH SARGENT, - - -	Worcester, Mass.
MASON F. COGSWELL, - -	Albany, N. Y.
FOSTER HOOPER, - - -	Fall River, Mass.
THOMAS C. BRINSMADE, -	Troy, N. Y.
GEORGE CHANDLER, - - -	Worcester, Mass.
GILMAN KIMBALL, - - -	Lowell, Mass.
JAMES McNAUGHTON, - -	Albany, N. Y.
USHER PARSONS, - - -	Providence, R. I.
S. D. WILLARD, - - - -	Albany, N. Y.
JOHN WARE, - - - -	Boston, Mass.
EBENEZER ALDEN, - - -	Randolph, Mass.
B. FORDYCE BARKER, - -	New York City.
JOHN G. ADAMS, - - -	New York City.
JARED LINSLEY, - - -	New York City.

Candidate for Honorary Membership.

A. J. FULLER, M.D., - - -	Bath, Me.

ORDINARY MEMBERS.

The names of those who have been Presidents are in capitals.

HARTFORD COUNTY.

S. L. CHILD, M. D., Chairman.

LUCIAN S. WILCOX, M. D., Clerk.

HARTFORD, Henry Holmes, S. B. Beresford, G. B. Hawley, G. W. Russell, David Crary, P. W. Ellsworth, E. K. Hunt, J. S. Butler, J. C. Jackson, A. W. Barrows, Thomas Miner, H. Gridley, William Porter, John F. Wells, William R. Brownell, P. M. Hastings, Edward Brinley, Stephen H. Fuller, George Clary, W. H. Tremaine, Lucian S. Wilcox, Henry S. Stearns.
BERLIN, E. Brandagee.
BLOOMFIELD, Henry Gray.
BRISTOL, Roswell Hawley.
BURLINGTON, William Elton, 2d.
Canton, Collinsville, R. H. Tiffany.
EAST HARTFORD, S. L. Child, H. K. Olmsted.
Broad Brook, Marcus L. Fisk.
Warehouse Point, Joseph Olmsted.
ENFIELD, J. P. Converse, A. L. Spalding.
Thompsonville, L. S. Pease.
FARMINGTON, Asahel Thompson.
Plainville, G. A. Moody.
GLASTENBURY, H. Clinton Bunce.
South Glastenbury, C. E. Hammond.
Eastbury, Sabin Stocking.
East Granby, Chester Hamlin.
West Granby, Justus D. Wilcox.
North Granby, Francis F. Allen.
MANCHESTER, Wm. Scott.
NEW BRITAIN, Samuel Hart, E. D. Babcock, B. N. Comings, S. W. Hart, Burritt B. North.
ROCKY HILL, R. W. Griswold.
SIMSBURY, R. A. White.
Tariffville, G. W. Sandford.
SOUTHINGTON, Julius S. Barnes, N. H. Byington, F. A. Hart.
SOUTH WINDSOR, H. C. Gillette, H. Goodrich.
East Windsor Hill, Sidney W. Rockwell, William Wood.
SUFFIELD, Aretus Rising, M. T. Newton.
West Suffield, O. W. Kellogg.
WETHERSFIELD, E. F. Cook, A. S. Warner, R. Fox.
WEST HARTFORD, Edward Brace.
WINDSOR, A. Morrison, S. A. Wilson.
WINDSOR LOCKS, Samuel W. Skinner, Levi Jewett.
AVON, Frank Wheeler.

NEW HAVEN COUNTY.

PHILO G. ROCKWELL, M. D., Chairman.

LEONARD J. SANFORD, M. D., Clerk.

NEW HAVEN, Jonathan Knight, Samuel Punderson, A. S. Monson, Charles Hooker, Nathan B. Ives, E. H. Bishop, Levi Ives, P. A. Jewett, David L. Daggett, George O. Sumner, David A Tyler, Henry Bronson, E. A. Park, S. G. Hubbard, W. J. Whiting, H. W. E. Matthews, C. A. Lindsley, Worthington Hooker, T. H. Totten, John Nicoll, Caleb H. Austin, Moses C. White, L. J. Sanford, Chas. L. Ives, Edward Bulkley, Jr., Wm. B. De Forest, Frederick L. Dibble, T. Beers Townsend, Horace P. Porter, George A. Ward, Evelyn L. Bissell.
Fair Haven, Charles S. Thomson, Wm. M. White.
ORANGE, Henry W. Painter.
BETHANY, Asa C. Woodward.
BRANFORD, H. V. C. Holcombe.
North Branford, Sheldon Beardsley.
CHESHIRE, A. J. Driggs, Edward P. Woodward.
DERBY, Charles H. Pinney.
Birmingham, Ambrose Beardsley.
Humphreysville, Thomas Stoddard, S. C. Johnson, Joshua Kendall.
GUILFORD, Joel Canfield, Alvan Talcott.
HAMDEN, Edwin D. Swift.
MADISON, D. M. Webb.
WEST MERIDEN, B. H. CATLIN, E. W. Hatch, Asa H. Churchill.
MILFORD, Hull Allen, L. N. Beardsley, Thomas Dutton.
NAUGATUCK, J. D. Mears, John W. Lawton.
North Haven, R. F. Stillman.
OXFORD, Lewis Barnes.
SOUTHBURY, A. B. Burritt.
South Britain, N. C. Baldwin.
WALLINGFORD, Nehemiah Banks.
WATERBURY, M. C. Leavenworth, G. L. Platt, John Deacon, G. E. Perkins, Philo G. Rockwell, Thomas Dougherty.
WOODBRIDGE, Isaac Goodsell.

NEW LONDON COUNTY.

ISAAC G. PORTER, M. D., Chairman.

N. M. TRIBOU, M. D., Clerk.

NEW LONDON, Dyer T. Brainard, Nathaniel S. Perkins, Isaac G. Porter, William W. Miner, D. P. Francis, Albert Hobron, Robert A. Manwarring, Robert McCurdy Lord, A. T. Douglas.
NORWICH, Richard P. Tracy, Erastus Osgood, Elijah Dyer, Elisha Phinney, A. B. Haile, Edwin Bentley, Daniel F. Gulliver, Lewis S. Paddock.
BOZRAH, Samuel Johnson.
COLCHESTER, Ezekiel W. Parsons, Fred'k Morgan, Melancthon Storrs.
FRANKLIN, ASHBEL WOODWARD.
GROTON, Joseph Durfee.
LEBANON, Joseph Comstock, Ralph E. Green.
LYME, Richard Noyes.
MONTVILLE, John C. Bolles.
PRESTON, Eleazer B. Downing.
STONINGTON, George E. Palmer, William Hyde, Jr.
Mystic, Mason Manning, N. M. Tribou.
Mystic Bridge, E. F. Coates.
Mystic River, A. W. Coates.
Noank, Orrin E. Miner.

LITCHFIELD COUNTY.

D. E. BOSTWICK, M. D., Chairman.

G. B. MILLER, M. D., Clerk.

LITCHFIELD, J. G. BECKWITH, H. W. Buell, D. E. Bostwick.
South Farms, Garry H. Miner.
CANAAN, Ithamar H. Smith, A. A. Wright.
South Canaan, John A. Gillett.
GOSHEN, A. M. Huxley.
HARWINTON, G. B. Miller.
NEW MILFORD, Jehiel Williams.
BRIDGEWATER, Horace Judson.
NORTHFIELD, D. B. W. Camp.
NORFOLK, Wm. W. Welch, John H. Welch.
PLYMOUTH, Samuel T. Salisbury.
Plymouth Hollow, Wm. Woodruff.
ROXBURY, Myron Downes.
Lakeville, Benjamin Welch, William Bissell, H. M. Knight.
West Cornwall, Samuel W. Gold, Edward Sanford.
Gaylord's Bridge, G. H. St. John.
SHARON, Ralph Deming, Wm. W. Knight.
Wolcottville, E. Bancroft, J. W. Phelps.
WARREN, John B. Derickson.
WASHINGTON, R. M. Fowler.
New Preston, S. H. Lyman, E. P. Lyman.
West Winsted, James Welch, J. W. Bidwell.
WOODBURY, Charles H. Webb, Harmon W. Shove.

FAIRFIELD COUNTY.

N. D. HAIGHT, M. D., Chairman.

GEORGE W. BIRCH, M. D., Clerk.

FAIRFIELD, S. P. V. R. Ten Broeck.
Greenfield, RUFUS BLAKEMAN.
Southport, Justus Sherwood.
BRIDGEPORT, D. H. Nash, H. L. W Burritt, Wm. B. Nash, Robert Hubbard, H. N. Bennett, Elijah Gregory.
BROOKFIELD, A. L. Williams.
DANBURY, E. P. Bennett, William C. Bennett.
HUNTINGTON, James H. Shelton.
NEW CANAAN, Samuel S. Noyes, Lewis Richards.
NORWALK, John A. McLean, Ira Gregory, Samuel Lynes, Jno. W. McLean, R. P. Lyon.
South Norwalk, M. B. Pardee.
RIDGEFIELD, O. S. Hickock.
STAMFORD, N. D. Haight, Lewis R. Hurlbutt.
North Stamford, George W. Birch.
DARIEN, Samuel Sands.
STRATFORD, Wm. T. Shelton, James Baldwin, R. C. McEwen.
TRUMBULL, George Dyer.
WESTPORT, George Blackman, David S. Burr.
GREENWICH, J. H. Hoyt.

WINDHAM COUNTY.

CALVIN B. BROMLEY, M. D., Chairman.

WILLIAM WOODBRIDGE, M. D., Clerk.

ASHFORD, John H. Simmons.
BROOKLYN, Jas. B. Whitcomb, Wm. Woodbridge.
CANTERBURY, Elijah Baldwin, Joseph Palmer.
CHAPLIN, Orrin Witter.
HAMPTON, Dyer Hughes, Jr.
Daysville, Justin Hammond.
South Killingly, Daniel A. Hovey.
West Killingly, Samuel Hutchins.
East Killingly, Edwin A. Hill.
Putnam, H. W. Hough, Gideon F. Barstow.
PLAINFIELD, WM. H. COGSWELL.
Moosup, Lewis E. Dixon.
Centreville, Charles H. Rogers.
STERLING, Wm. A. Lewis.
VOLUNTOWN, Harvey Campbell.
THOMPSON, Lowell Holbrook, John McGregor.
Woodstock, Lorenzo Marcy.
North Woodstock, Asa Witter, Ebenezer Witter.
West Woodstock, Milton Bradford.
POMFRET, Hiram Holt, Lewis Williams.
WINDHAM, Chester Hunt.
Scotland, Calvin B. Bromley.

MIDDLESEX COUNTY.

IRA HUTCHINSON, M. D., Chairman.

S. W. TURNER, M. D., Clerk.

MIDDLETOWN, Chas. Woodward, Elisha B. Nye, George W. Burke, John E. Blake, Rufus Baker.
CROMWELL, Ira Hutchinson.
CHESTER, S. W. Turner.
CLINTON, D. H. Hubbard.
DURHAM, R. W. Mathewson.
EAST HADDAM, Asa M. Holt, Datus Williams.
HADDAM, Miner C. Hazen.
Middle Haddam, A. B. Worthington.
Killingworth, A. J. Webster.
PORTLAND, George O. Jarvis, G. C. H. Gilbert.
SAYBROOK, Asa H. King.
Essex, A. H. Hough, C. H. Hubbard.
Deep River, Edwin Bidwell, N. Nickerson.
Westbrook, Horace Burr.

TOLLAND COUNTY.

ALDEN SKINNER, M. D., Chairman.

GILBERT H. PRESTON, M. D., Clerk.

TOLLAND, O. K. Isham, G. H. Preston.
BOLTON, Charles F. Sumner.
North Coventry, Eleazer Hunt.
South Coventry, Timothy Dimock, Henry S. Dean.
Ellington, J. A. Warren.
HEBRON, Orrin C. White.
MANSFIELD, Wm. H. Richardson.
Mansfield Centre, Earl Swift, O. B. Griggs, E. G. Sumner.
Mansfield Depot, Norman Brigham.
SOMERS, Orson Wood.
Stafford, Wm. N. Clark.
West Stafford, J. C. Blodgett.
Stafford Springs, C. B. Newton.
Staffordville, S. F. Pomeroy.
Rockville, Alden Skinner, Stephen G. Risley, John B. Lewis.
WILLINGTON, Francis L. Dickinson.
VERNON, N. Gregory Hall.

SUMMARY OF ORDINARY MEMBERS FOR 1862; WITH DEATHS REPORTED FOR THE YEAR ENDING APRIL 1, 1862.

	Total.	Deaths.
Hartford County,	70	0
New Haven County,	68	4
New London County,	35	0
Litchfield County,	35	0
Fairfield County,	33	1
Windham County,	28	0
Middlesex County,	22	0
Tolland County,	23	0
	314	5

NOTE.—Former Fellows of the Connecticut Medical Society are *permanent members* of the Annual Convention, having the privilege of attending all meetings and performing all the duties of Fellows, except voting. All the members of the Society are invited to be present at the meetings of the Convention.

DEATHS OF MEMBERS DURING THE YEAR ENDING APRIL 1, 1862, WITH THE AGE AND CAUSE OF DEATH.

New Haven County.

Lyman Parker, died April 25th, aged 71 years, of Pleuro-pneumonia.
Samuel Lloyd, died August 3d, aged 55 years, of Heart disease.
Andrew Castle, died August 26th, aged 58 years, of chronic Gastritis.
Eli Ives, died October 8th, aged 82 yrs., and 8 mo's., of Hepatization of Lungs.

Fairfield County.

Frederick J. Judson, died Feb. 6th, aged 58 years, of Phthisis.

Omitted accidentally from the obituary record of 1860.

Wells Beardsley, of Litchfield Co.—he died April 5th, 1860, aged 78 years.

DUTIES OF COUNTY CLERKS.

To warn County Meetings.

To record the proceedings of the County Meetings.

To collect the taxes and pay the same to the Treasurer.

To transmit to the Secretary a list of the elected Fellows, and the person recommended as a candidate for a gratuitous course of lectures in the Yale Medical College, immediately after the County Meetings, for publication.

To make certificates of Fellowship, to be transmitted to the Secretary, on or before the first day of the Convention.

To transmit to the Treasurer the names of the Fellows elect, immediately after the County Meetings.

To return to the Treasurer the names of Members delinquent on taxes, with the amounts severally due from each.

To transmit duplicate lists of the Members of the Society to the Secretary and Treasurer, on or before the first day of the Convention, on penalty of five dollars for each neglect.

To report to the Secretary of the State Society, on the first day of its Annual Convention, the names, ages, and diseases of the Members of this Society who have died during the year preceding the 1st of April in each year, in their several County Societies.

RULES OF ORDER.

1. Organization.
2. Certificates of Membership presented and read by the Secretary.
3. Committee on the Election of Fellows.
4. Address of President.
5. Election of Officers for ensuing year.
6. Unfinished business of previous year disposed of.
7. Reception and reference, without debate, of Communications, Resolves, &c., from the several Counties, and Members of the Convention.
8. Reading Treasurer's Report.
9. Committee to audit the same.
10. Standing Committees appointed.
11. Committee to nominate Delegates to American Medical Association.
12. Committee on Candidates for Gratuitous Course of Lectures.
13. Committee on Honorary Degrees and Honorary Membership.
14. Committee to nominate Dissertator.
15. Dissertation.
16. Reports of Committees appointed on County Communications, Resolves, &c.
17. Reports of Standing Committees.
18. Reports of Committees in the order in which business was brought forward in Convention.
19. Miscellaneous business.

LIST OF ADDRESSES AND DISSERTATIONS

DELIVERED IN CONVENTION.

1793 President's Address, by Dr. Leaveritt Hubbard.
1794 Prize Essay on Autumnal Bilious Fever, by Dr. S. H. P. Lee.
1794 Prize Essay on the Properties of Opium, by Dr. G. Shepherd.
1795 Eulogy on Dr. L. Hubbard, by Dr. Eneas Monson, President.
1795 Prize Essay on the preparation of Antimony, by Dr. F. P. Ouviere.
1795 Prize Essay on the Different Species of Colic, by Dr. T. Betts.
1796 Prize Essay on the Contagion of Yellow Fever, by Dr. F. P. Ouviere.
1796 Prize Essay on Cynanche Tonsillaris, by Dr. S. H. P. Lee.
1796 Prize Essay on the Most Eligible Mode of Increasing Medical Knowledge in this State, by Dr. Lewis Collins.
1796 Prize Essay on the same subject, by Dr. Gideon Shepherd.
1798 History of a case of Bilious Concretion, by Dr. L. Hopkins.
1798 An Essay, by Dr. Jared Potter.
1799 A Dissertation, by Dr. Thaddeus Clark.
1800 A Dissertation on Lunacy, by Dr. Nathaniel Dwight.
1804 Essay on the Stafford Mineral Waters, by Dr. S. Willard.
1812 Essay on the necessity of a Hospital for Lunatics in this State, by Dr. Nathaniel Dwight.
1817 Dissertation on the Deleterious Effects of Ardent Spirits, by Dr. W. R. Fowler.
1818 On Ergot, by Dr. William Buel.
1820 Dissertation on Typhus Fever, by Dr. Thomas Miner.
1821 Dissertation on Uterine Hemorrhage, by Dr. Samuel Rockwell.
1822 Dissertation on the Yellow Fever at Middletown, by Dr. William Tully.
1823 Dissertation, by Dr. Dyer T. Brainard.
1829 Dissertation on extra-uterine Conception, by Dr. Geo. Sumner.
1830 Dissertation on Diseases of the Ear, by Dr. Charles Hooker.
1835 Dissertation on the Vitality of the Blood, by Dr. Benjamin Welch, Jr.
1836 Influence of Moral Emotions on Disease, by Dr. E. H. Bishop.
1837 An Address by the President, Dr. Thomas Miner.
1837 A Dissertation on Scarlet Fever, by Dr. Archibald Welch.
1838 A Dissertation on Spinal Irritation, by Dr. Isaac G. Porter.
1839 A Dissertation on the Mental Qualifications necessary to a Physician, by Dr. Henry Bronson.
1840 A Dissertation on the Advantages of Prompt and Efficient Practice in Acute Diseases, by Dr. Richard Warner.

1841 An Address by the President, Dr. Silas Fuller.
1841 A Dissertation on Insanity as a subject of Medical Jurisprudence, by Dr. Amariah Brigham.
1842 A Dissertation on Uterine Irritation, by Dr. Chas. Woodward.
1843 An Address by the President, Dr. Elijah Middlebrook.
1843 A Dissertation on Phlebitis, by Dr. Pinckney W. Ellsworth.
1844 A Dissertation on the Respect due to the Medical Profession and the Reasons that it is not awarded by the Community, by Dr. Worthington Hooker.
1845 A Dissertation on Laryngismus Stridulus, by Dr. N. B. Ives.
1846 A Dissertation, Practical Observations on Typhus Fever, by Dr. Theodore Sill.
1847 A Dissertation on the Importance of a Medical Organization and the Advantages resulting from it, by Dr. E. K. Hunt.
1848 A Dissertation on Some Forms of Non-Malignant disease of the Cervix Uteri, by Dr. B. Fordyce Barker.
1849 An Address by the President, Dr. Archibald Welch.
1849 A Dissertation on Hygiene, by Dr. Alvan Talcott.
1850 A Dissertation on Medical Jurisprudence, by Dr. J. C. Hatch.
1851 An Address by the President, Dr. George Sumner, on the Early Physicians of Connecticut.
1853 An Address by the President, Dr. Rufus Blakeman, on the Early Physicians of Fairfield County.
1853 A Dissertation on Popularizing Medicine, by Dr. S'l. Beach.
1854 A Dissertation on Diseased Cervix Uteri, by Dr. Wm. B. Casey.
1855 A Dissertation on Registration as the Basis of Sanitary Reform, by Dr. Stephen G. Hubbard.
1857 An Address by the President, Dr. Benjamin H. Catlin, on the Connecticut Medical Society.
1857 A Dissertation on the Medical Profession, by Dr. Benj. D. Dean.
1858 An Address by the President, Dr. Benjamin H. Catlin, on the Claims of the Regular Medical Profession to the Confidence of the Community.
1859 An Address by the President, Dr. Ashbel Woodward, being an Historical Account of the Connecticut Medical Society.
1859 A Dissertation on the Issue, by Dr. Rufus Baker.
1860 An Address by the President, Dr. Ashbel Woodward, on Medical Ethics.
1860 A Dissertation on Hygiene, by Dr. A. B. Haile.
1861 An Address by the President, Dr. Ashbel Woodward, on Life.
1861 A Dissertation on Hereditary Predisposition, by Dr. J. B. Lewis.
1862 An Address by the President, Dr. Josiah G. Beckwith, on Medical Progress.
1862 A Dissertation, being a review of the present state of the question of Spontaneous Generation, by Dr. M. C. White.

APPENDIX A.

Report of the Committee on Examination.

The annual examination in the Medical Institution of Yale College of Candidates for the degree of Doctor of Medicine, was held Wednesday, January 8th, 1862.

The Board of Examiners present were, on the part of the Connecticut Medical Society, Josiah G. Beckwith, M.D., of Litchfield, President; Joel Canfield, M.D., of Guilford, William Woodruff, M.D., of Plymouth Hollow and Horace Burr, M.D., of Westbrook; and on the part of Yale College, Professors Jonathan Knight, Charles Hooker, Benjamin Silliman, Jr., Pliny A. Jewett and C. A. Lindsley. The examinations were eminently satisfactory and resulted in the approval of the following gentlemen for the degree of Doctor of Medicine, who read and defended Theses on the subjects attached to their names, viz:

Edward Orson Cowles, B.A., of North Haven, on the Mammary Gland.

Nathaniel Wells French, of Concord, New Hampshire, on Phthisis.

Edwin Latham Gardner, of Montrose, Penn., on the Age in which we live.

Jarius Francis Lines, of New Haven, on Catarrhal Conjunctivitis.

Rollin McNeil, of New Haven, on Purpura Hæmorrhagica.

Charles Woolley Sheffrey, of New Haven, on Scarlatina.

A. T. Douglas, M.D., of New London, and Henry Bronson, M.D., of New Haven, were appointed to give the annual addresses to the Candidates, in 1863 and 1864.

Joel Canfield, M.D., of Guilford, was appointed to report the proceedings of the Board to the President and Fellows of the Conn. Medical Society. The Board then adjourned to July 24th, 1862—the day before Commencement.

[Signed] JOEL CANFIELD.

APPENDIX B.

Report of the Committee of Publication.

THE Committee of Publication would respectfully report—

That the following communications have been received, which the Committee would recommend for publication in the Proceedings of the current year, viz:

A paper on Diphtheria, by G. B. Hawley, M. D., of Hartford.

An Account of *two* anomalous cases of Disease, by David Crary, M. D., of Hartford.

A Dissertation on the Plastic constituents of the Blood, by Leonard J. Sanford, M. D., of New Haven.

A paper on Hypodermic Medication, by Benjamin H. Catlin, M. D., of West Meriden.

A Dissertation on the Sympathetic Nerve, by N. Gregory Hall, M. D., of Vernon.

An account of a case of Cerebro-Spinal Disease, by Ralph Deming, M. D., of Sharon.

Brief sketches of the Early Physicians of Norwich, by Ashbel Woodward, M. D., of Franklin.

Notes on a case of Ligation of the External Iliac Artery, by J. W. Lawton, M. D., of Naugatuck.

Respectfully submitted.

P. M. HASTINGS, *Acting Chairman.*

APPENDIX C.

Report of the Committee on Registration.

THIS Society has, at different times, appointed Committees on Registration of Births, Marriages, and Deaths. At the annual Convention held in Hartford, May, 1857, an appointment was made for this purpose, and it was raised to the dignity of a Standing Committee from which an annual report was expected. Dr. E. K. Hunt, the first Chairman, made a full and interesting report to the Convention in Waterbury, May, 1858. Since that time, the Record shows no action of the Committee, and it is presumed there has been none.

This neglect is to be sincerely regretted, for a very partial examination by the present Committee, manifests the necessity of important improvement in our system of Registration.

The late period at which your Committee were able to direct attention to the subject of their appointment, will prevent their making as full and perfect a report as they could wish. We can barely call attention to some defects in our system of Registration, and suggest some alterations which if carried out, would make it more perfect.

Two able reports on this subject have beeen made to the American Medical Association and published in the Transactions, since action was taken by our Committee. One, in 1858, by Edward Jarvis, M. D., of Massachusetts, a member of the Committee on Registration, the other, in 1859, by W. L. Sutton, M. D., Chairman, and signed by the different members of the Committtee. One great object of the latter report was, to perfect and recommend for adoption "a uniform plan for registration reports of Births, Marriages and Deaths." This report ought to have received the early attention

of this Society, and our blanks and reports made to correspond with the plan there recommended.

BIRTHS.

The Certificates for births recommended by the Committee of the American Medical Association require, in addition to the particulars of those used in our State, the color of the Child, whether white, black or mulatto, whether born alive or dead, the maiden name of the mother, birth place of parents, father and mother—and your committee would suggest the addition of one more—the number of the birth, 1, 2, 3, &c. These facts are all important in enabling us to compare the fecundity of the different States, and the relative proportion of the sexes. All births should be included in one table of births: The still-born and plurality births should also be arranged in separate tables.

The law of Connecticut requires the return of the *name* of the child, if it have any; the result is, as we are informed by the State Librarian, we get only about five or six per cent. of the names. He recommends that the returns of births be made quarterly, by the Registrars instead of by Physicians.

In Rhode Island, it is made the duty of the Town Clerks to collect the statistics of births, and for each full report of a birth so obtained, he receives ten cents. The Committee would recommend that one-half the fee now allowed to Physicians and midwives be withheld till the name in full is returned, and if they fail to return, then the Registrar shall obtain the name and receive the balance of the fee. The fee, though three-fifths larger than in Rhode Island, is a very trifling affair to most Physicians, and would have very little influence upon their returns, but it has an important effect in securing returns from irregular practitioners and midwives. It would be interesting to compare the relative fecundity of the native born, and those of foreign birth; by having the birth place of the parents, we could ascertain this fact.

A perfect record of births is important for a variety of purposes. It enables those who have a fancy for tracing family genealogies—quite a numerous and influential class—to secure their object speedily, cheaply and with a perfection not otherwise attainable.

It establishes the identity of persons for the purpose of settling estates, thus securing the ends of justice. Again, it often settles the question of the residence of paupers, a question which has cost the inhabitants of this State many times the expense of registration: In a word, it is a ready method of establishing the *identity* of an *individual*, which may be of eminent importance in a great variety of ways, the want of which in former times, has already been the occasion of an immense amount of litigation, with its attending alienation of friendship which ought to have been sacred and permanent, together with an incalculable amount of costs, both of time and money. If we fail to secure the names of those whose births are recorded it will be of little value, and these important ends will not be secured.

MARRIAGES.

The Committee of the American Medical Association require, in addition to the questions in the blanks in this State, the No. of marriage of the groom, the No. of marriage of the bride, names of the parents of each party, their birth place and occupation. These, in the opinion of your Committee, are important and seasonable requirements and should be added to our blanks.

In view of the immense injury to the morals of the community resulting from the culpable looseness with which the marriage relation is entered into, and the frequent divorces occurring, the Committee would recommend the alteration of our statute laws so that they shall require the marriage contract to be drawn up in legal form, signed by the parties, sealed and witnessed in the presence of the proper officer, and that this should constitute the marriage in law; after which, the parties with the certificate signed by the officer, might go to a Clergyman and have the usual religious ceremony performed.

DEATHS.

The only additions to our blanks for the return of deaths, necessary to make them conform to those recommended by the Committee of the National Society, are the names and birth places of the parents of the deceased persons; our State Librarian is of the opinion that these should be added, and with this opinion your Committee coincide.

The State Librarian also thinks that if the certificates of death were returned to him, instead of the abstracts, it would more certainly preserve names and other facts which are now lost. He is quite emphatic on this point.

If these were sent without correction by the local Registrars unaccompanied with an abstract, they would, the Committee think, be found very imperfect and unreliable. Registrars who are qualified for this office and take an interest in this business, do very much to perfect their returns. The Committee are acquainted with some Registrars whose labors in this respect are very faithful and important. Their returns *after correction* and with an abstract, would avoid all objections, and would be more convenient and useful for reference.

It is proper to remark under this head, that if the still-born are recorded among the births, they should also be included in the deaths.

We can judge of the perfection or rather imperfection of our system of Registration returns and reports, by comparing them with those of other States.

"The law of Massachusetts requires the Secretary of State to prepare three sets of blank forms or sheets for recording severally the births, the marriages, and the deaths. These sheets are ruled with distinct columns, for each of the facts which are to be reported. One half of these sheets are bound in separate volumes, and the others are unbound. The volume of each of the three kinds, and the loose sheets, are sent to each of the cities and towns in the State, and the clerks record, both in the volume and on the loose sheets, all the facts which are required by law in respect to the births, marriages and deaths."† The copy on sheets is returned to the Secretary of State, the bound volumes are retained in his office. The town and city clerks are required to collect the facts in regard to the births, and the sexton or undertaker, those of the deaths. "The Secretary of State, in each year employs some skillful Physician, learned in these matters, to digest and arrange the facts into tables and prepare such deductions and observations as may make them most useful to the people. Dr. Josiah Curtis, an eminent

† Dr. Jarvis's report, Transactions of the Am. Med. Association, Vol. XI, page 529.

statistician, had charge of the reports for 1848, 1849, 1850, 1851 and 1857, and Dr. Nathaniel B. Shurtliff, a scholar of rare acquirements and historical research, had the charge of the intervening reports. The documents produced by these gentlemen are very valuable and highly useful to the world at large, and especially to the student of the law of population and mortality, and they are important contributions to the science of life. They now make an annual volume of over two hundred pages; the last, covers nearly three hundred pages."†

In Rhode Island also, the Secretary of State, with the approval of the Committee of Registration of the Rhode Island Medical Society, appoints some well qualified Physician to superintend the tabulation of the statistics and contribute remarks thereon. Dr. Edward R. Crane, of Providence, was employed in 1859 and 1860. In the latter year his remarks and observations cover fifty-four pages and contain many interesting facts and important principles in connection with the vital movements of the population.‡ As in Massachusetts, the town and city clerks collect the facts in regard to births, and the failure to return the name of the child is the exception, not the rule. The Secretary of State in his report for 1860 says, "there are also a few towns which have failed to return the names of the children born."

That Massachusetts, which is a State eminent in every good work, should take the lead in Registration, was to say the least, not unexpected, but that Rhode Island should have more perfect returns, and reports altogether superior to ours, was not anticipated.

The Committee would by no means be understood to disparage the labors of our excellent State Librarian, they would rather award him their hearty and sincere thanks for what he has done for a number of years in making out our reports without, as we understand, fee or reward. But, as he remarks, it has no connection with his office as Librarian, and he further states that he has no

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† Transactions of the Am. Med. Association, Vol. XI, pages 529, 30.

‡ Since this Article was written we have learned that the reports of the R. I. Med. Soc. for 1858 and 1861 were prepared by Charles W. Parsons, M. D., of Providence. The Committee would here express their obligations for copies of the same, as also for those of 1859 and 1860.

special taste for such labors. He would cordially unite with the Committee in recommending the appointment of some competent Physician who would relish such labors and have a laudable ambition to signalize himself in the work, as well as serve and do honor to the State.

Your Committee would recommend that this Convention appoint, or authorize the Committee of Registration to appoint, some Physician to assist in making the next report upon Registration and that he be requested to accompany it with such remarks and observations as will be calculated to promote the advancement of science and the cause of registration in our State.

B. H. CATLIN, *Chairman.*

APPENDIX D.

Report of the Advisary Board Committee.

The Committe appointed at the last Convention "to act as an Advisary Board in future appointments of Surgeons and Assistant Surgeons to the Connecticut Volunteers," would report—

That they met at Hartford on the 30th day of May, 1861, and organized by the appointment of Dr. G. W. Russell as Chairman, and Dr. Robert Hubbard as Secretary.

By vote, their services were formally tendered to the Governor of the State, who thanked the Convention for responding to his wishes, and stated that as the Committee was large, he should call upon a part of them for aid.

An Act was soon after passed by the General Assembly, providing for the examination of all candidates for Surgeons and Assistant Surgeons by a Medical Board, and the undersigned were informed by notice from the office of the Adjutant General that they were to constitute this Board.

It may perhaps be interesting to the profession to learn something of our proceedings, and there seems to be no impropriety in making the following statement to the Convention.

The Board has held twelve sessions, ten, in Hartford, and two, in New Haven, and has examined fifty-seven persons. Of these, fourteen have been recommended to the Governor to be commissioned as Surgeons, and twenty-five as Assistant Surgeons.

We felt the responsibility of our position, and have endeavored to do our duty faithfully, both to the Volunteers, and to those gentlemen who presented themselves to us. It was not thought to be necessary to make the examinations as critical or as extensive as in the regular service, but to ascertain if the candidates were well instructed in the practical duties of their profession,

medical as well as surgical, and were ready and prompt in showing it. It is believed that in knowledge and efficiency, our medical corps will compare favorably with that of any State.

Two of the number have died in the service, Dr. John B. Welch of Winsted, second Assistant of the 12th Regiment, on board the ship Fulton, on the passage to Ship Island, of Scarlatina; and Dr. D. W. C. Lathrop of Norwich, first Assistant of the 8th Regiment, at Newbern, North Carolina, of Typhoid Fever. Dr. Welch gave promise of much success, and Dr. Lathrop was indefatigable in attention to his duties, and had won the respect and confidence of his regiment.

GURDON W. RUSSELL,
P. A. JEWETT,
ASHBEL WOODWARD, } *Committee.*

NOTE.

The Sanitary Report of Hartford County for 1861, accepted for publication on motion of Dr. E. K. Hunt–see page 57–could not be obtained.

PROCEEDINGS.

THE *Seventy-first* Annual Convention of the Connecticut Medical Society was held in *Rockville*, Tolland County, May 27th and 28th, 1863.

The Convention was called to order by J. G. Beckwith, M.D., President, at 11 o'clock, A. M., of the 27th.

The Secretary having read the list of Fellows returned by the Clerks of the several county meetings, Drs. Gideon L. Platt, Calvin B. Bromley and George W. Burke, were appointed a committee on Credentials.

Dr. Platt, Chairman, reported the following list of Fellows for the present year; and also, as Delegates from other State Medical Societies, Jacob P. Whittemore, M.D., of New Hampshire, and Thomas C. Finnell, M.D., of New York. Report accepted.

FELLOWS.

HARTFORD COUNTY.

G. W. Sanford, M.D.
†George B. Hawley, "
S. W. Rockwell, "
William Scott, M.D.
George A. Moody, "

NEW HAVEN COUNTY.

Nathan B. Ives, M.D.
Gideon L. Platt, "
Moses C. White, "
†Daniel M. Webb, M.D.
†T. Beers Townsend, "

NEW LONDON COUNTY.

†George E. Palmer, M.D.
†N. M. Tribou, "
D. P. Francis, "
John Gray.
†A. B. Haile, M.D.

† Absent.

FAIRFIELD COUNTY.

†E. P. Bennett, M. D.
†A. L. Williams, "
Roger M. Gray, M. D.
†O. S. Hickok, "

WINDHAM COUNTY.

†Gideon F. Barstow, M. D.
Calvin B. Bromley, "
†Samuel Hutchins, "
†Lewis Williams, M. D.
†William Woodbridge, "

LITCHFIELD COUNTY.

†A. M. Huxley, M. D.
James Welch, "
†David E. Bostwick, "
†Charles N. Webb, M. D.
†Ralph Deming, "

MIDDLESEX COUNTY.

R. W. Mathewson, M. D.
George W. Burke, "
†Charles Woodward, M. D.

TOLLAND COUNTY.

William N. Clark, M. D.
Edwin G. Sumner, "
A. R. Goodrich, M. D.

The following Resolution, offered by the Secretary, was passed:

Resolved, That Drs. Whittemore of New Hampshire, and Finnell of New York, and Delegates from other Societies who may arrive, be welcomed as guests of this Society, and that the committee of arrangements be instructed to provide for their accommodation at the Rockville Hotel.

The reading of the annual Address by the President, was deferred to 11 o'clock, A. M., of Thursday, the 28th.

The election of Officers being next in order, Drs. A. R. Goodrich and L. J. Sanford, were appointed Tellers.

The following gentlemen were duly elected, viz:

EBENEZER K. HUNT, M. D., PRESIDENT.
NATHAN B. IVES, M. D., VICE-PRESIDENT.
JAMES C. JACKSON, M. D., TREASURER.
LEONARD J. SANFORD, M. D., SECRETARY.

The newly elected Officers took seats upon the platform, when

The President appointed as a Committee to bring forward Unfinished Business, Drs. M. C. White, James Welch and Wm. N. Clark.

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† Absent.

The President informed the Convention that he was in possession of a donation to the Connecticut Medical Society, of Fifty Dollars, which the donor, Dr. Gurdon W. Russell of Hartford, had suggested should be appropriated as a premium for a Dissertation on some Medical subject.

On motion of Dr. White, it was

Resolved, That the above communication be referred to a Committee consisting of the President and two Fellows—the latter to be appointed by the former. The President designated as the Committee, Drs. E. K. Hunt, M. C. White and F. L. Dickinson.

Adjourned to 2 o'clock, P. M.

Afternoon Session.

On motion of Dr. G. W. Sanford, it was

Resolved, That the thanks of this Convention are due, and they are hereby tendered to Josiah G. Beckwith, M.D., for the able and impartial manner in which he has discharged the duties of President, during the past two years.

The Committee on Unfinished Business reported, through Dr. White, Chairman, a communication from the "Advisory Board Committee" concerning appointment of Surgeons for the Army; Resolutions from the New London County Medical Meeting, praying for action of the Society to secure abatement of Taxes upon Registration Certificates; and a petition from Dr. P. G. Rockwell of Waterbury, urging the appointment of William H. Hine for gratuitous attendance upon the next course of Lectures of the Yale Medical School, should any vacancy occur in the several Counties. Report was accepted, and the communications submitted were ordered to be laid on the table.

The Ex-Treasurer read his report of the last year.

Drs. Wm. Scott, James Welch and G. W. Burke, were appointed a Committee to audit Treasurer's account. The account, on examination being found correct, was accordingly reported by Dr. Scott, Chairman. Report accepted.

The following, is a general summary :

Cash in Treasury, - - - - - -		$4.98
Due from Clerks, - - -	$1627.94	
Deduct one half for commissions, bad debts, abatements, &c., - - -	813.97	
Leaves - - - - - - -		813.97
Total of Cash and Due, - - -		$818.95
The Society owes for outstanding debentures, - -		469.62
Leaves balance in favor of the Society, of -		$349.33
Balance " " last year, was		90.24
Excess of balance of this year over that of the last, is - - -		$259.09

On motion of the Secretary, it was unanimously

Resolved, That the thanks of this Society are due, and they are hereby tendered to George O. Sumner, M.D., its late Treasurer, for the faithful manner in which he has discharged the difficult and laborious duties of the office, during a period of twelve years.

The following, offered by Dr. Beckwith as a By-Law, was unanimously adopted,

Resolved, That, hereafter, the Secretary of this Society be Chairman, *ex officio*, of the Committee of Publication.

The vacancies on the Standing Committees were filled by general ballot—and, in order to facilitate the business, it was, on motion of Dr. Goodrich, voted to ballot on only *one* vacancy on the same ticket.

The following gentlemen were elected, viz:

D. P. Francis, M.D.,
Sidney W. Rockwell, M.D., } Committee on Examination.

Calvin B. Bromley, M.D.,
William Scott, M.D., } Committee to nominate Physician to Retreat for Insane.

Gideon L. Platt, M.D.,
David A. Tyler, M.D., } Committee to nominate Professors in Medical Institution of Yale College.

Francis L. Dickinson, M.D.,—Committee of Publication.

George W. Burke, M.D.,
Lucian S. Wilcox, M.D., } Committee on Registration.

The President appointed the following Committees, viz:

On Honorary Degrees and Honorary Membership:

Drs. S. W. Rockwell, A. R. Goodrich and Wm. N. Clark.

On Candidates for Gratuitous Course of Lectures:

Drs. C. B. Bromley, James Welch and E. P. Bennett.

To nominate Dissertator and Alternate:

Drs. G. W. Burke, D. P. Francis and S. W. Rockwell.

To nominate Delegates to Meeting of American Medical Association for 1864:

Drs. G. W. Sanford, G. L. Platt and John Gray.

To nominate Delegates to Meetings of State Medical Societies in correspondence with Connecticut Medical Society:

Drs. J. G. Beckwith, M. C. White and R. W. Mathewson.

On motion of Dr. White, the petition of Dr. P. G. Rockwell in behalf of Mr. Hine was referred to the Committee on Candidates for Gratuitous Course of Lectures.

Dr. White, of the Committee on the "Russell Donation," submitted the following recommendations, viz:

I. That the sum of Fifty Dollars, tendered to this Society by G. W. Russell, M.D., to be expended for a Prize Essay, be accepted, and that the thanks of the Society be presented to Dr. Russell for his munificent donation.

II. That this Convention offer the above Fifty Dollars as a prize for the best Essay that shall be presented by any member of the regular profession in this State, before April 1st, 1864, to a Committee appointed for the purpose.

III. That a special Committee of *three*, be appointed to select *two* subjects for dissertation, and to examine and decide upon the merits of the Essays which may be presented,—the subjects and the conditions of the prize to be published with the Proceedings of this Convention. Report was accepted and its recommendations adopted.

On motion of Dr. G. W. Sanford, it was

Resolved, That a Committee of three, including the President as Chairman, be appointed by the Chair to fulfill the requirements of the third recommendation.

The President accordingly appointed as the Committee, Drs. E. K Hunt, Charles L. Ives and H. M. Knight. [for subjects, and conditions of award, vide Appendix F.]

Samuel H. Pennington, M.D., and Frederick N. Bennett, M.D.,

from the Medical Society of the State of New Jersey, were introduced to the Convention.

The report of the Committee on Examination—Dr. Horace Burr, Sec'y,—was read and accepted and its publication ordered with the Proceedings. [vide Appendix A.]

The report of the Committee to nominate Professors in the Medical Institution of Yale College, read, in the absence of the Secretary Dr. H. M. Knight, by Dr. Beckwith, was accepted, unanimously adopted and ordered published. [vide Appendix B.]

Dr. Beckwith, Chairman of Committee to nominate Delegates to State Medical Societies, recommended the appointment of the following, who are authorized to provide substitutes in case they do not attend the meetings.

To Medical Society of the State of New York; Drs. J. G. Beckwith, G. W. Russell and P. G. Rockwell.

To Medical Society of the State of New Jersey; Drs. L. J. Sanford, C. A. Lindsley and M. C. White.

To Medical Society of the State of Massachusetts; Drs. James Welch, N. B. Ives and G. L. Platt.

To Medical Society of the State of New Hampshire; Drs. Worthington Hooker, J. C. Jackson and J. W. Barker.

To Medical Society of the State of Rhode Island; Drs. D. P. Francis, A. R. Goodrich and E. K. Hunt.

The report was accepted and the gentlemen designated appointed.

Dr. G. W. Sanford, Chairman of Committee to nominate Delegates to the Meeting of the American Medical Association for 1864, recommended Drs. C. Woodward, H. N. Bennett, Wm. Hyde and Wm. H. Cogswell. The report was accepted and the nominees appointed.

Dr. Bromley, Chairman of Committee to nominate Candidates for a gratuitous course of Lectures, recommended the following list, viz:

Henry E. Childs, of Hartford County.
Durell Shepard, of New Haven County.
John D. Brundage, of Fairfield County.
William Witter, of Windham County.
George S. Beckwith, of Litchfield County.
Edward D. Hubbard, of Middlesex County.
John C. Herrick and William H. Hine, from the State at large.

The report was accepted and the students named, appointed.

Miscellaneous business being in order

Dr. George W. Burke suggested the expediency of modifying somewhat the present arrangements of the Society in order to secure a more cordial coöperation of the members at large, in its undertakings.

After a brief discussion of the subject it was referred for consideration and report, to a Committee consisting of one from each County, to be appointed by the Chair.

The President announced as the Committee, Drs. G. W. Sanford, Hartford County; G. L. Platt, New Haven County; D. P. Francis, New London County; R. M. Gray, Fairfield County; C. B. Bromley, Windham County; James Welch, Litchfield County; G. W. Burke, Chairman, Middlesex County; Wm. N. Clark, Tolland County.

On motion of Dr. Beckwith, it was voted to expunge from the "Duties of County Clerks," the articles requiring certificates of Fellowship to be transmitted to the Secretary and Treasurer, on, or before the first day of each annual meeting.

Dr. M. C. White moved that a tax of two dollars be laid upon all members of the Conn. Med. Society, payable on the first day of June, 1863. Passed.

Also, on motion of Dr. White, the Secretary was instructed to publish 600 copies of the Proceedings for the use of the members of the Society.

An invitation from Dr. Goodrich to spend this evening sociably at the Rockville Hotel, as guests of the Tolland County Medical Association, was accepted.

Adjourned to 8 o'clock, A. M., to-morrow.

Thursday, May 28th, 1863.

Pursuant to adjournment the Convention was called to order by the President.

Dr. S. W. Rockwell, Chairman of Committee on Honorary Degrees and Honorary Membership, nominated Dr. John Gray of New London County as a Candidate for the Honorary degree of Doctor of Medicine, and for Honorary Membership in the Connecticut Medical Society, the following gentlemen, viz:

Samuel H. Pennington, M.D., Newark, N. J.
Frederick N. Bennett, M.D., Orange, N. J.
Thomas W. Blatchford, M.D., Troy, N. Y.
Thomas C. Finnell, M.D., New York City.
N. C. Husted, M.D., New York City.
Jacob P. Whittemore, M.D., Chester, N. H.

The report was accepted and the nominations approved.

On ballot, A. J. Fuller, M.D., of Bath, Me., was elected an Honorary member of this Society.

On motion of Dr. Beckwith, it was

Resolved, That the thanks of the Convention be, and they are hereby tendered to the Tolland County Medical Association and to the citizens of Rockville and vicinity, for their munificent provision and generous hospitality extended to the members of the Profession during the session at Rockville at the present time,

Dr. Burke, Chairman of the Committee to devise a plan for promoting the usefulness and popularity of the Society, submitted the following Resolutions;

Whereas, The custom of this Society in regard to debentures and taxes was, at the session of 1861, materially changed and whereas many good members who had faithfully complied with the requirements of the Society until they had reached the age at which according to our By-Laws they were exempt from taxation now feel aggrieved at being again taxed without any corresponding equivalent, therefore,

Resolved, I. That the payment of the tax of two dollars, be optional with all members over *sixty* years of age.

II. That the practice of furnishing a dinner from the funds of this Society is inconsistent with the true interests of the Profession and ought to be discontinued.

III. That the *surplus* of income of the Society, after paying current expenses, be devoted to the purchase of valuable medical publications to be distributed equally to all members *not in arrears*.

IV. That the Clerks of the several County Societies be requested hereafter, in their annual returns, to specify the *names* of paying members.

V. That the taxes of the Fellows in attendance at the annual State Convention be abated,—in place of the old debenture system.

VI. That hereafter, the meetings of the Society be held as formerly, —alternately in Hartford and New Haven. Also

Resolved, That the foregoing Resolutions be submitted to the County Meetings for action at their next session and, if ratified, that they be incorporated in the By-Laws of this Society.

The report was accepted and ordered to be sent to the several County Associations for their consideration.

Dr. Platt proposed the following Resolution, which was adopted on motion of Dr. Welch.

Resolved, That this Convention recommend to the County Medical Associations that elect five Fellows to the State Convention, that *two of the Fellows be elected for two consecutive years*, and that those Counties electing three Fellows, elect *one Fellow for two consecutive years.*

Dr. Burke, Chairman of Committee to nominate a Dissertator for the ensuing year, reported the names of P. M. Hastings, M.D., of Hartford, as Dissertator, and John E. Blake, M.D., of Middletown, as Alternate. The nominations were confirmed.

The report of the Committee of Publication, read by Dr. H. W. Buell, acting Chairman, was accepted and ordered published. [vide Appendix C.]

The report of the Committee on Registration, by Dr. E. K. Hunt, Chairman, was accepted and ordered published. [vide Appendix D.]

The "Advisory Board Committee" (see Proceedings for 1861, pp. 28–9), made a report through Dr. Russell, Chairman, who also presented a catalogue of the appointments made since the organization of the Committee. The report and catalogue were ordered printed. [vide Appendix E.]

Dr. Beckwith, of the Delegation to the last annual meeting of the Medical Society of the State of New York, read a report of the proceedings of that meeting, which was accepted and ordered to be lodged on file.

Dr. Jackson, of the Delegation to the last Convention of the Medical Society of the State of New Jersey, made a brief oral report of its proceedings, which was also accepted.

Dr. M. C. White gave an account of an interesting and novel surgical case which he was requested to put in writing for the next number of the Proceedings, (see page 289 of this volume.)

An Essay by Dr. Ashbel Woodward, being a vindication of our Army Surgeons against the charge of incompetency, was read by his son, P. H. Woodward, Esq., and ordered published.

On motion of the Secretary, it was voted that the thanks of the Society be tendered to Dr. A. Woodward, Surgeon of the 26th Regiment of Conn. Volunteers, for his valuable paper in defense of our Army Surgeons.

The Annual Dissertation, on "Logic applied to Medical Science," was read by James C. Jackson, M.D., of Hartford; a copy of which was requested for publication.

On motion of the Secretary, it was voted that the thanks of this Society be extended to Dr. Jackson, for the able manner in which he has discharged the duties of Dissertator on the present occasion.

J. G. Beckwith, M.D., of Litchfield, then commenced his Annual Address,—pending its reading, a motion to adjourn to 2 o'clock, P. M., was carried.

Afternoon Session.

Dr. Beckwith concluded the reading of his Address.

On motion of Dr. Burke, it was

Resolved, That the thanks of the Society are hereby tendered to its retiring President, Dr. Beckwith, for the eloquent historical Address delivered before the present Convention; and that a copy be requested for publication.

An invitation from the Fellows of New Haven County to hold the next annual Meeting in New Haven, was accepted.

On motion of Dr. Burke, it was

Resolved, That the public Dinner, at the expense of the Society, be dispensed with next year.

On motion of Dr. White, it was

Resolved, That the securing of Communications for the next literary meeting devolve upon the Committee of Publication.

Adjourned *sine die.*

Attest, L. J. SANFORD, *Secretary.*

OFFICERS OF THE SOCIETY,

FOR 1863–64.

PRESIDENT.
EBENEZER K. HUNT, M.D., OF HARTFORD.

VICE-PRESIDENT.
NATHAN B. IVES, M.D., OF NEW HAVEN.

TREASURER.
JAMES C. JACKSON, M.D., OF HARTFORD.

SECRETARY.
LEONARD J. SANFORD, M.D., OF NEW HAVEN.

STANDING COMMITTEES.

Committee on Examination.

EBENEZER K. HUNT, M.D., *ex officio.*
MILTON BRADFORD, M.D.
S. L. CHILD, M.D.
LEWIS BARNES, M.D.
D. P. FRANCIS, M.D.
SIDNEY W. ROCKWELL, M.D.

Committee to nominate Physician to Retreat for the Insane.

GILBERT H. PRESTON, M.D.
ISAAC G. PORTER, M.D.
JOHN E. BLAKE, M.D.
CALVIN B. BROMLEY, M.D.
WILLIAM SCOTT, M.D.

Committee to nominate Professors in the Medical Institution of Yale College.

H. M. KNIGHT, M.D.
JOSEPH PALMER, M.D.
RALPH DEMING, M.D.
GIDEON L. PLATT, M.D.
DAVID A. TYLER, M.D.

Committee of Publication.

LEONARD J. SANFORD, M.D., *ex officio.*
HENRY BRONSON, M.D.
MINER C. HAZEN, M.D.
CHARLES L. IVES, M.D.
FRANCIS L. DICKINSON, M.D.

Committee on Registration.

PLINY A. JEWETT, M.D.
GEORGE W. BURKE, M.D.
LUCIAN S. WILCOX, M.D.

MEMBERS OF THE SOCIETY.

HONORARY MEMBERS.

*FELIX PASCALIS,	New York City.
JAMES JACKSON,	Boston, Mass.
*JOHN C. WARREN,	Boston, Mass.
*SAMUEL L. MITCHILL,	New York City.
*DAVID HOSACK,	New York City.
*WRIGHT POST,	New York City.
BENJAMIN SILLIMAN,	New Haven.
*GEORGE M'CLELLAN,	Philadelphia, Pa.
*JOHN MACKIE,	Providence, R. I.
*CHARLES ELDREDGE,	East Greenwich, R. I.
*THEODRIC ROMEYN BECK,	Albany, N. Y.
*JAMES THATCHER,	Plymouth, Mass.
EDWARD DELAFIELD,	New York City.
JOHN DELAMATER,	Cleveland, Ohio.
*WILLIAM P. DEWEES,	Philadelphia, Pa.
*JOSEPH WHITE,	Cherry Valley, N. Y.
JACOB BIGELOW,	Boston, Mass.
WALTER CHANNING,	Boston, Mass.
*PHILIP SYNG PHYSIC,	Philadelphia, Pa.
*LEWIS HEERMAN,	U. S. Navy.
*DANIEL DRAKE,	Cincinnati, Ohio.
*HENRY MITCHELL,	Norwich, N. Y.
NATHAN RYNO SMITH,	Baltimore, Md.
VALENTINE MOTT,	New York City.
*SAMUEL WHITE,	Hudson, N. Y.
REUBEN D. MUSSEY,	Cincinnati, Ohio.
*WILLIAM TULLY,	Springfield, Mass.
RICHMOND BROWNELL,	Providence, R. I.

* Deceased.